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A
COMPENDIUM
OF
THEORETICAL AND PRACTICAL
MEDICINE.

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A
COMPENDIUM
OF
THEORETICAL AND PRACTICAL
MEDICINE;

COMPRISING WITH
THE SYMPTOMS, DIAGNOSIS, PROGNOSIS, AND
TREATMENT OF DISEASES,

A GENERAL REVIEW OF
PHYSIOLOGY AND PATHOLOGY,

TOGETHER WITH
AN ESTIMATE OF THE PRESENT STATE OF MEDICAL
SCIENCE.

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1825.



TO

THE GENTLEMEN,

WHO HAVE ATTENDED AND WHO ARE ATTENDING

THE AUTHOR'S LECTURES

ON

THE THEORY AND PRACTICE OF MEDICINE;

THIS WORK

IS DEDICATED,

WITH EVERY WISH FOR THEIR SUCCESS IN AN

ARDUOUS PROFESSION,

AND THEIR PROSPERITY THROUGH LIFE.

PREFACE.

WITH the volumes of Good and Gregory, Temple and Thomas, in the hands of our students, what can be wished for more? and if a compendium be required, is it not furnished by the *Vade Mecum* of Dr. Hooper?

No one can be more sensible to the respective merits of these several works, than is the Author of the following pages. The first on the list affords, as I have elsewhere stated, a noble specimen of what genius is capable of effecting, when backed by industry and regulated by taste. Of Dr. Gregory's *Elements*, recently published, it is impossible to speak with undue praise. Dr. Temple's *Practice of Physic* has too long enjoyed a high reputation to stand in need of any encomium from my pen; and whoever wishes to see at one view all that practical authors have been about, during the last quarter of a century, may consult with advantage the single volume of Dr. Thomas.

For the immediate purposes of mere practical reference, Dr. Hooper's work possesses likewise considerable value ; but still a *compendious combination of pathology with practice* ; of doctrine with fact ; of present-day science with former information, has long appeared to me a decided desideratum in medical literature. Under this impression, the items composing the present tract have been put together ; and, under this impression, the tract itself is, at length, after many unlooked for delays, respectfully presented to the medical student.

With respect to its construction, I have aimed at a familiarity of style. In this aim I have probably failed, and may be found to be dogmatic and vulgar, while wishing to be impressive and colloquial ; if so, I have failed in power rather than in feeling, and must be pardoned on the score of good intention. To one thing I can conscientiously and confidently speak ; namely, sincerity of purpose ; and the circumstance may, in part, be taken as a guarantee for that sincerity, that some of those individuals, with whose doctrines the greatest freedom has been used, are among my most respected friends.

The catalogue of authors, to whom reference is made in different parts of the work, will be thought, perhaps, meagre and unsatisfactory. The plain truth

is, that in the execution of this part of my undertaking I almost repented my engagement ; for, even with the assistance of Dr. Young's erudite work on medical literature, I could find but few monographs deserving recommendation. To him, therefore, who shall desire more copious lists than I have been able to make out, I recommend reference to Dr. Young's book. If the medical student possess this, together with those systematic volumes above named ; if he possess, moreover, Dr. Paris's and Dr. Gordon Smith's useful and elegant works, on Medical Jurisprudence ; Dr. Baillie's Morbid Anatomy ; Mr. Cooke's admirable edition of Morgagni ; and one or more of the current journals, which are conducted in the present day with unprecedented energy and ability, he will find, that he wants very little beside to complete his mere medical library.

My design, it will be seen, has been limited to the indication of English books ; and I have only twice deviated from this intention, in the mention of Dr. Morgan's and Vacca's names. In respect to the former, I felt myself called upon to state his priority of claim to John Hunter, on the doctrine of Purulent Formation ; and I further feel myself called upon to say, that I learnt this fact

from an accidental perusal of Dr. Cholmeley's Syllabus of Lectures. Of Vacca, I thought it right to take especial notice, since he was certainly the first to allude distinctly to the doctrine of Debility, in its connection with the inflamed state. Let me just here mention, that I have met with a work since the completion of my own, which seems, both in design and execution, entitled to respectful notice; I allude to Turner's Medico-Chirurgical Education.

Were my plan not thus limited, with slight exception, to British productions, I should have great pleasure in urging the student's attention to an excellent work now in the course of publication from Paris, entitled "*Dictionnaire de Médecine*;" a work which some of our active and talented men in this country would do well in an attempt to rival.

I cannot conclude without congratulating the profession and the public on the present state of the medical art. A provision is at length made against incompetency in any of its branches; and the education of the practitioners in pharmacy is now such, that those who claim to be ranked in the higher department, must constantly look well to their not being outstripped in attainment by those to whom they have hitherto been accustomed to dictate.

All that appears to me still wanting to complete that reform which has so happily begun, is, that the class of practitioners now referred to, should be remunerated for their important services, not as tradesmen, but as legitimate members of a liberal profession ; that the higher honors of medicine, and even of surgery, should be made of far more difficult attainment, than is at present the case ; and that the distinction should be more decidedly and practically observed between physic and surgery. For perfection in the former, the requisite qualities and qualifications are, if not of a higher, certainly of a different kind. To medicine belong philosophical acumen, a promptness of drawing correct inferences, from occasionally doubtful premises, a large grasp of mind, and comprehensive attainment. Surgery requires cleverness, and tact, and mechanical dexterity, and minute anatomical knowledge. I will not say of our friends, the surgeons, when they meddle with medicine, what was once said of the city orators in the British senate, that “ they make sad work of it ; ” but I will say, that important as anatomical knowledge, natural and morbid, is to us all, something more is required than a familiarity with “ the blood and filth of the dissecting-room,” to form the mind,

and regulate the habits, and give character to the decisions of the qualified and real physician.*

BEDFORD ROW,
January 5. 1825.

* I am aware that the charge above made on surgery only partially applies; and even where it does so, it is against the principles rather than the persons that I would direct my strictures; almost, perhaps, before the ink is dry with which I pen the present page, I may shake hands in cordial friendship with one or more eminent surgeons, whom I would and do refuse to meet in sick rooms, although *they* would readily obey the call to *medical* consultation. But this practice, as I have just said, is only partial; it was but yesterday I heard of a surgeon refusing advice to a wealthy applicant, on the ground of its being a medical case; and if any in the ranks of the profession be entitled to the claim of universal attainment and power, it is the individual to whom I now allude, whose name I need not mention when I state, that some eight or nine months since he surprised many and delighted all who heard his lectures, by a manifestation of splendour of genius, correctness of taste, richness of information, and rectitude of principle.

ERRATA.

- Page 12. line 18. for *tenacity* read *tenuity*.
 — 29. — 23. for *infarctions* read *infarctious*.
 — 30. — 3. for *citu* read *ictu*.
 — 60. — 20. for *pars-vaga* read *par-vagum*.
 — 65. dele the *comma* after Wilson.
 — 80. line 25. for *reverted* read *adverted*.
 — 168. — 28. for *applicatur* read *applicetur*.

COMPENDIUM
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MEDICINE.

PART I.
GENERAL PHYSIOLOGY AND PATHOLOGY.

Is Medicine a science of certainty or conjecture? What claim has it upon public estimation?

THESE questions, like most other disputable points, have been discussed too much in the abstract. The art of healing is, in one sense, established upon fixed and certain principles; in another, it is an art of conjecture and uncertainty. If I give opium to relieve pain, and pain immediately subsides, I make an experiment in physics, and obtain a certain result; I do the same in ascertaining by actual observation the cathartic virtue of jalap, or the emetic quality of ipecacuan: but I am not so sure of being directed by undeviating principles, when, from these simple and single trials, I proceed into medical institutes of a more complicated cast and character. Truth must, indeed, still be the result of our successful researches, equally in the more complex, as in the more simple matters of in-

vestigation; but the nature of medical evidence, as far as we have power to appreciate it, becomes more speculative and presumptive as we widen the circle of our pursuit; and whether we depend upon the observations of others, or think and act for ourselves (we cannot indeed do either exclusively), we find that organic changes, and vital susceptibilities, whether natural or morbid, whether ordinary or extraordinary, are far more elusory and unsusceptible of being fixed down, so to say, to a certain point, than are the objects of natural history, or the materials we employ when engaged in mere physical research.

To this difference between medical and physical or natural science, I shall have immediately to revert, when making a preliminary remark or two on the questions of nosology and nomenclature, and shall, in this place, limit myself to a brief examination of the postulate, that medicine is as useful as well as a true science. Oppugners of the therapeutic art have said, that did it fulfil its high pretensions, disease must by this time have been mouldered down almost into annihilation; whereas we see, that, in spite of the boasted improvements of one age, in physiology, and pathology, and practice, the succeeding age finds as much disorder to cope with, and the combat quite as difficult as was formerly the case. But it is a law of nature and of providence, that, in proportion to our facility in effecting, more comes before us to effect. Savage man has but few desires, few enjoyments, few diseases, and (we speak comparatively) few remedies. Make him the subject of luxurious refinement, and you increase his *pains* as well as his pleasures. Nay, the very modes you adopt to ease his pains, eventually become sources of new measiness; but these modes he *will* have recourse to, these barterers he voluntarily makes. Could it then even be proved that medical interference of all kinds might be dispensed

with, and mankind in the long run better for the change, still the change could not be brought about, since relief from suffering will ever be sought for at any expence, and at any risk. And with respect to the argument taken from the continuance of disease in spite of medical effort; who would ever think of the necessity of surgeons being superseded on account of improvements in surgery? Who would forego the advantages resulting from the altered state of obstetrical science, because casualties and untoward circumstances have been on the increase rather than decline, since nature has given way to art, and empiricism to principle, in reference to the susceptibilities and demands of the puerperal state? How do our oculists and dentists multiply upon us! and yet affections of the sight, and disorders of the teeth are, to say the least, as frequent as ever; nay, when the pretensions of the medical practitioner are brought, as they are too apt to be, either directly or by implication, in competition with the artisans of the profession, our claims to regard will probably be found to have better standing than those of our respected coadjutors; since *we* can adduce the mitigated malignity and diminished number of infectious maladies, the almost total destruction of some epidemic complaints, and even the lessened mortality of endemic visitations; benefits these, proceeding partly, it must be conceded, from an ameliorated state of medical polity and practice; while, as above intimated, surgical and obstetrical accidents and ailments were never, than at the present time, more abundant.

Physic, then, we must conclude to be partly conjectural, and partly demonstrative — partly a necessary evil, and partly a positive good; and we are now called upon to say a word or two on the mode in which the particulars it comprehends should be arranged.

NOSOLOGY AND NOMENCLATURE.

Let a given number of diseases pass successively in review before half a dozen individuals of the medical profession, who shall be of equal standing and of equal discernment. Let each of these individuals be required to name the diseases thus subjected to his observation, without reference to, even without being aware of his brethren's decision on the same point. The six lists thus made out would be found very materially to vary, not only in mere nomenclature, but in actual predication respecting the essence of the diseases. We will suppose further, that these several maladies shall have terminated fatally, that an examination shall take place in order to investigate their seats and sources, and that the observers of the morbid phenomena during life shall be called upon to state their anticipations of what the knife of the dissector is about to unfold. In this case we should likewise find medicine, or rather the professors of medicine, much *at fault*; there would, at the very least, be a want of unanimity in opinion with regard to *post mortem* shewings, and the actual demonstration would probably both differ materially from each prophecy, and in itself fail of fully unfolding the nature of those morbid processes which had been going on during the life of the patient.

Now nothing of this kind would have place when the subjects of investigation should be portions of the material, or, more properly speaking, inorganic world. Here the differences in adjudication respecting mode and essence would only arise out of education in different systems of science, or be consequent upon different degrees of knowledge on the part of the several individuals who should be called upon to decide. If I know botany as well as Linnæus, and have been trained in his school of arrange-

ment and nomenclature, there can be no difference of opinion either as to the name or nature of a plant that shall be placed before us. The solution also of a geometrical problem would be the same by me as by another, although the facility of effecting it might differ; but I may have as much science, and sagacity too, as Sydenham, without being found to agree with Sydenham in every point, either of pathology or practice. The very nature then of medical evidence is totally inconsistent with attempts to identify and arrange diseases, as you name and classify a plant by its generic and specific characters; and the assumptions of the nosologist are altogether based upon an error in principle. They suppose the existence of something which really does not exist, and it is amusing, or rather perhaps I should say humiliating, to open volumes, and find learned authors elaborately discussing the legitimate ranks and seats of morbid affections in nosological schemes, when the scheme itself, in respect of its abstract nature, is as little entitled to regard, as the question of the schoolmen on the number of angels that might dance upon the point of a needle without interfering with each other's evolutions—angelic being assumed subtile substance, as opposed to the materiality of the needle's point.

Even to name a disease, much more to class it, is to do something presumptive and uncertain; unless, indeed, by a kind of metonymical management, we make the cause of such disease actually to stand in place of the disease itself, as when we say an individual has got a cold; but even in this case we immediately may discover a source of confusion and error, since cold not only affects in a variety of ways, but also the same series of morbid symptoms which at one time shall result from this agent, will at another time and place spring out of other sources.

This indication of disease by metonymy is likewise ob-

noxious to another objection, and that of a formidable and fatal nature both to nomenclature and class — for the cause itself is often a matter of dispute ; some, for example, will tell you that true fever is invariably and necessarily consequent upon contagion ; while others will laugh in your face if you talk of contagion at all in any other way than as applicable to a few specific and eruptive affections.

With these announcements of feelings in reference to nosology, my reader may deem me inconsistent in selecting *any* scheme for the present purpose of producing an epitome of medical science. But the fact is, we have only a choice of evils, and must endeavour, out of these, to select the one that makes the nearest approach to good. It has been said, that, with the human body before us, we have only to commence with any given portion of it, and proceed upwards and downwards, or both, as we shall have fixed upon any starting place. But, unfortunately, medical and anatomical science do not go hand in hand through all the mazes of morbid being ; or, at any rate, sometimes one and sometimes the other will be lost in shade, as the eye of the observer aims at pursuing them through all their intricate walks and wanderings. Epilepsy, for instance, in an anatomical scheme of classification, would be put down as a disorder of the head ; but who that has not a disorder in his own head does not know, that this manifestation of morbid state at times arises from deranged conditions of parts very distant from the head — and if, with the learned and laborious Dr. Good, we add function to structure, or append physiology to anatomy, we shall still find our resources for accuracy to fail. Allowing, for example, that the word asthma is properly expressive of a particular malady, how can we with propriety class it as an affection of the respiratory or digestive function, until we shall have agreed among ourselves whether it be

occasionally engendered in a sympathetic way, or whether it be inherently, and absolutely, and invariably a pulmonary or respiratory derangement?

This anatomico-physiological scheme has further a very momentous difficulty to contend with; since, for the sake of following functions, it necessarily separates by very wide gaps, disorders of the same parts and organs, “for while (as the candid and able author himself admits) inflammation of the stomach and bowels belong, as inflammatory affections, to one class, indigestion and cholera, though disorders of the same *organs*, must necessarily, from their nature, be ranged under another:” and so on through the whole of the topography.

After much reflection on these very intricate, and, I had almost said, vexatious points, I have come to the present conclusion, that the scheme of Cullen, however cumbrous and clumsy in some of its parts and proportions, is still the best that has been devised; and its merit, besides the accuracy of its symptomological part, consists in this, that it recognizes, more simply and satisfactorily than any other, the three leading or master functions of the animal economy; viz. the circulating or supplying, the assimilating or repairing, and the percipient or sentient. These functions, not only being distinctly recognizable amidst all the multiform manifestations of the living energy, but each of them having, in some degree, its respective susceptibility to disordered being, though not with any thing like the distinctness and exclusion that the division into sanguiferous, nervous, and lymphatic disposition implies.

The objections that every where start up against even Cullen's accuracy, will be noticed as we proceed; and I am now to make a few preliminary remarks on those faculties and functions that have just been named. It would seem a more natural order in going over these heads, to

speak of the assimilating immediately after the circulatory system; treating of the nervous organization or faculty either first or last; but since Cullen, in his arrangement, has introduced nervous diseases immediately after the sanguiferous, we shall pursue his course in this process. And here let me again insist upon what I am desirous should be impressed on the mind of the student, that Dr. Cullen's, in common with every other attempt that yet has been, and perhaps we may say ever will be, instituted to fasten down disease to fixed points, is, in a great measure, supposititious: medicine and natural history, let it ever be recollected, are, in respect to classification, inherently and essentially different affairs.

CIRCULATING FUNCTION.

Blood. To call this fluid the vital fluid, is in one sense correct, in another erroneous. As the primordium of all other organic parts solid or fluid, the blood has some legitimaey of claim to the epithet distinctly of vital: but I would be bold to say, that in Mr. John Hunter's application of the term it has not. All parts of an organized being are properly vital, while they constitute portions of the bodies integral, and to fix, even by implication, vitality (which is but an expression of the whole), upon certain parts, is to fall into the error of the *entity* philosophers, to search for things that are not to be found, and which have no real existence. Separate a limb from a living body, and it very soon shows you that it depended, blood and bone, and membrane and muscle, and all, upon its connexion with that body. Pour out blood into a basin, and you will shortly find that, with all its living energies and properties, it becomes amenable to those laws which are only to be resisted by life; and in what this

life consists, is as well known to the ploughman, who whistles his way home after his daily labour, conscious of very little else than mere existence, as it is to the ablest disputant of the schools, whether he shall happen to be a materialist or immaterialist, and it is quite immaterial which. But to return:

Blood, when separated from its vessels, spontaneously divides itself into a solid and fluid portion; to which portions the terms *crassamentum* and *serum* have been applied.

Of this serum 100 parts contain, according to Brande, between eight and nine parts of albumen, rather less than one part of the carbonate of soda, and about the same quantity of common salt, the remaining 90 parts being water. Other chemists have presented different results from their analyses; but it is exceedingly difficult to obtain correct information on the point, and Mr. Brande observes, that the composition of the fluid in question is probably liable to much variation.

The solid portion consists of colouring matter and a white fibrous substance, named fibrin, or coagulable lymph, and which is supposed to furnish the deposit, that constitutes the fibrous or muscular part of the frame.

The colouring principle, although connected with, does not reside in the globules of the blood, for they may be made perfectly colourless by water, while they still retain their globular form.

Coagulation does not take place at all times and under all circumstances with equal facility and readiness. Sometimes the separation is more tardy than at others, and both the more solid and the more fluid parts assume likewise different aspects under different circumstances. To these varieties it behoves us to pay a little attention.

What, in the first instance, is the cause of coagulation? In the next place, why is the blood at different times

more or less speedily and completely separable into solid and fluid? And, thirdly, what is the reason that at times you see the solid part curve round at its edges and become cupped, as it is expressively called, while over its surface a deep layer of whitish matter is perceived; and, on the contrary, at other times, you observe nothing of this crisped cuppy appearance, and none or very little of the above-mentioned stratum?

Cause of Coagulation? Since blood is homogenous, and fluid, while circulating through its vessels, and separates immediately upon extravasation; it was a natural enough conclusion, that motion was the source of its fluidity, and rest of its coagulation. But that this is not precisely the case is proved, by coagulation taking place in extravasated blood, even though it be agitated as it is received into a vessel; and, by fluidity being preserved for a long time in the blood, that shall still be retained in a vein or artery, such vein or artery being isolated from the general system of circulating vessels by ligatures. It would seem that this preservation of blood in a fluid state, has some inexplicable connexion with vital energy, for it has been observed, that the tendency to speedy coagulation is conspicuous in proportion to the lowness of the living powers, as has been well illustrated by the accurate and important experiments of Thackrah and others. Mr. Charles Bell has ingeniously suggested, whether non-coagulation of living-circulating blood is not referrible to its being uninfluenced during life by the laws of attraction, to which all dead matter is subject. This, however, is rather stating than explaining the thing, and I am always anxious, for the sake of science, that we should be careful not to receive mere announcement of circumstance for explication of cause; it is a want of care on this head, that has vitiated the reasonings of John Hunter's followers, and

made them see in their master's speculations more than this great master, in organic philosophy himself, ever saw or meant to express.

Vitality, however, being thus connected with the blood's fluidity, and the coagulation of the fluid being thus almost demonstrably dependent upon a loss of life, it has been inferred, that when coagulation is long in taking place, the blood before it was extravasated had been more completely vitalized, as it were, or in better condition, and that, therefore, the time it takes in effecting completely its separation may be received as a token of its condition, while it was circulating with the common mass. In reference to this point, indeed, the following inferences have been axiomatically deduced: "1st, That coagulation commences speedily in proportion to the weakness of the system, and slowly in proportion to the tonic state, and the degree of inflammation. 2d, That the firmness of the crassamentum after the exudation of the serum, is characteristic of sthenic disease. 3d, That this state is further indicated by an inordinate proportion of crassamentum, and a state of debility by an undue quantity of serum."

This tardiness of separation, under circumstances of high vitality, mounting up even to the grade of disease, has been attributed to the violent agitation the blood had undergone previously to its being drawn, and the consequently more complete intermixture of its solid and fluid portions; but that this is not exactly the explanation of the thing is proved by the blood coagulating, even when agitated as above stated; and a recent author, of much ingenuity, has endeavoured to show, that fibrin, when it exists in a healthy proportion, rather conduces to, than retards coagulation. This principle, however, seems somewhat inconsistent with the fact, that in low conditions of the vital power coagulation is effected, as we have above

remarked, with more celerity than in health, or in what has been named sthenic disease.

But with respect to our last question, what is the rationale of the *cupped* and *buffed* state of the blood? These appearances have generally been attributed to an over-proportion of fibrin, and to its more intimate admixture with the other portions in consequence of the violent action of the vessels in those subjects in which the appearances occur. The latter circumstance accounting for the slowness of coagulation, the former for the cupped and buffed condition of the blood. Tardiness, then, of concretion, with a superabundance of fibrin, would seem the explanation of eup and buff, when these phenomena manifest themselves conjunctively; and when the buff appears exclusively of the cup, viz. in connection with a less firm erassamentum, and with a larger quantity of the serous portion of the fluid, it must then be attributed to the actual tenacity of the blood, or more complete intermixture of its constituent principles, and not to an increase of fibrin. This distinction it is highly important, in a practical point of view, to recognize, since it teaches us, that what is called the inflammatory crust on blood, cannot be taken *in se* as proof of an inflammatory state.

Buff on the blood, it may be noticed, is not always the same in appearance under the same degree of vascular action, abstractedly considered; in inflammation of the lungs it is more white, in inflammation of the liver it is darker and of a yellowish hue; and it has been further remarked, that the buff appears in greater or less quantity, as the vascular excitation, upon which it has depended, may have especially implicated one or another texture; inflammation of mucous surfaces, not displaying it with so much readiness, as of deep-seated or parenchymatous substance. It must, moreover, be observed,

that the modes and times of the blood being taken, greatly influence the buffy formation; an aperture of moderate size; a rapid and continuous jet, and receiving the fluid in a narrow vessel, have been systematically enumerated as circumstances conducing to the buffy coat.

Blood, it is natural enough to suppose, will undergo chemical as well as mechanical or material change, under circumstance of disease. About these latter, however, the physiologist is still more in the dark than in reference to the former; and it is a curious fact, that, while the frame is under the influence of some of the most virulent maladies, the blood itself does not manifest corresponding change. Take *blood* from an individual in small-pox, mix it with the blood of another individual, and you will not thereby impart the disease. Again; eat the flesh of an animal that has died of hydrophobia, by which you at the same time eat some of the blood of that animal, but you will not in consequence suffer; while the smallest conceivable portion of *secreted* matter will, when mixed with the blood of a person in health, impart the specific poison of small-pox, and engender the hydrophobic distemper.

This latency, if it may be so expressed, of materials thus drawn from the blood, or, as it were, manufactured out of it, is one of the most curious subjects of speculation which the bodily compages present: it takes place as well in natural as in morbid circumstances,—as well in mere organic as in animal existence. Thus, “the marine plant, the ashes of which form soda, if sown in a box filled with earth that does not contain a particle of that alkali, and moistened with distilled water, furnishes it in as great quantity as if the plant had been growing on the borders of the sea, in a swampy soil, always inundated by brackish or salt water;” and thus “some regions as New South Wales, at least on this side the Blue Mountains, contain

no lime-stone whatever, and others no iron or sulphur, while all these are capable of being obtained, apparently, as freely from the blood of the inhabitants of such regions, as from those who live in quarters where such materials enter largely into the natural products of the soil; it is, perhaps, most reasonable to conclude," says the author from whom we have taken the last extract, "that they are generated in the laboratory of the animal system itself, by the all-controlling influence of the living principle."

To this peculiarity in blood, and in the fluids of organized being, I have thus been desirous to give a prominence in the present proem, because I think it not quite sufficiently appreciated in some of our pathological principia and practical indications. We are sometimes, probably, disposed to attribute too much to chemical or mechanical change, and too little to vital agency. Others again have erred on the contrary side; and have talked of excitation as though it were a simple and unmodifiable power; and have unjustly derided the chemico-medicinal indications of remedial treatment, which are, to a considerable extent, legitimate in principle and applicable in practice.

In what consists the colouring property of blood, opinion still varies: the fluid has been supposed to receive its colour from the iron that it contains; but the quantity of this mineral which enters its composition seems too small for the purpose, and the sentiments of those physiologists seem more in accordance with truth, which ascribe the colour of the blood to a removal of a portion of carbone from it in its passage through the lungs. This, however, is rather a negative than a positive explanation of the matter: or, rather, it explains merely the change from venous into arterial blood, since in the most thoroughly

decarbonized blood we find no constituent principles which solve the difficulty. There is very little difference, as we shall afterwards see, between chyle and blood, excepting in the latter possessing, and the former being without, colour; but subject chyle as freely as may be to the action of oxygene gas, and you do not thereby colour it.

The average quantity of blood in the adult subject may be put down at between thirty and forty pounds. Man has more blood in proportion to his size and weight than other animals.

CIRCULATION.—In this rapid sketch of functional peculiarities, I am to suppose my reader acquainted with anatomy. I shall not, therefore, stop to describe the form and situation of the heart, or the structure and distribution of those vessels which receive blood from, and restore it to the centre of the circulating system. But I am called upon to say, that the mode in which this transmission and reception is effected, is still involved in something of obscurity and doubt; and up to this moment physiologists are not agreed as to what share the heart, and what share the vessels have, in the great business of the blood's movements. Dr. Harvey, the discoverer of the circulation, ascribed the whole projectile force to the heart, and looked upon the arteries to be rather regulators of, than positive agents in, the propulsory act. And this opinion, with various modifications, is maintained by many to the present hour; while others advocate the doctrine of as absolute propulsion in the larger arteries as in the heart itself. In the arterial tunics there are found layers of fibres, at least the structure has been usually described to be fibrous, but it is denied by others that true muscularity can be awarded them, since they are not contractile under those excitants which invariably irritate real fibre; and

therefore, say the philosophers who support the exclusive power of the heart, nothing in the way of legitimate inference can be drawn from the apparently fibrous construction of the artery. They argue, that the alternate contraction and dilatation of arteries which are implied in the opposite theory, have never been the subjects of actual demonstration. They urge further, that a function of such constant necessity as that of the circulation, cannot well be supposed subject to those casualties and impediments which would be likely to arise out of a separate and independent action in the general conduits through which the blood flows: and they moreover deduce inferences in favour of their theory from the very absence of these casualties; for, say they, ossifications and other sources interfering with vascular contractility, may exist to a considerable extent in the arterial system, without giving rise to that irregularity of, and obstruction to the blood's projection, did that projection depend upon the contraction and re-action of the conveying vessels. You never, our theorists urge, find the pulse to vary in the different parts where it is felt, as in the one and the other arm; but the motion of the artery which gives rise to the phenomenon, named pulsation, is synchronous as to time and uniform as to mode throughout the body. The utmost power, then, that these physiologists award to the vessels is that of elasticity, and what has recently been termed tonicity, by which the dilatation from the impulse of the blood is preserved within certain limits, and thus the current maintained.

The vascular physiologists, if we may so call them, on the other side, allege, that the deduction respecting a want of muscularity in arteries on the score of their being destitute of fibrine, is fallacious, since acknowledged muscles will in some instances resist all stimuli, excepting

that of their specific or peculiar excitant. To the allegation that the contraction and dilatation of the artery has never been seen, they reply that the branches of the vessels which have been exposed to view in order to ascertain this point, were either not sufficiently large for its detection, or the exposure has been made under such circumstances as to interfere with the experiment's accuracy. They moreover deny that there is the uniformity and contemporaneousness in the arterial beats that has been contended for; and they go on more positively to urge that it is difficult to conceive such a small apparatus as is the heart to be endowed with the vast projectile power ascribed to it. They still further advance the fact of topical and temporary excitation, as being inconsistent with this sort of passivity in the vessels presumed on the opposite side. A blush of shame, for instance, shall overspread the cheek, without the momentum of the heart and general circulation being increased; but these local excitations are likewise frequently of a much more positive and even permanent kind, as in the increase and diminution of secretion, from varying circumstances, in the case of partial and sudden growths both natural and morbid, of the waste and decay of other parts. And in reference to the argument taken from ossified vessels, let it be recollected, say the opponents, that the heart itself has been found ossified through its whole substance, or incumbered with a tumour which has surrounded it, and adhered to it in all sides, without having occasioned more impediment to the due flow of blood, than at other times has been produced by the same sorts of obstruction implicating merely the larger branches of the arteries.

But the main difficulty which the hypothesis has to encounter, may be taken from the circumstances of what is called capillary circulation: admitting the projectile

force of the heart to throw at once the whole mass of blood into the small or capillary vessels, how does it find its way completely through and *out* of them? or by virtue of what power does it gain admittance into the commencing series of reconveying vessels?

This, indeed, is a part of the circulatory process that, in my mind, remains still unexplained by any theory hitherto propounded; and without the supposition of some imbibing principle on the part of the venous extremities of the capillary system, or of the heart itself, or both, it is difficult to conceive by virtue of what agency the interchange from one system of vessels to another is brought about. Accordingly we find in some writings of authors who have been impressed with this difficulty, this venous or cardiac suction, as it were, supposed; but the principle has been introduced in a very gratuitous and vague manner, and we still, I repeat, are in want of a satisfactory solution of this interesting question: viz. How does the reflux circulation in the capillary vessels commence?

With respect to the controversy to which I have just adverted, and aimed at giving an outline, I think a sort of intermediate opinion would in this, as in most controverted points, prove nearest the truth. Certain it is, that the capillary arteries possess a projectile power of considerable independence upon the heart; but, it must be recollected, that in these vessels, or rather in this part of the arterial organization, the blood moves rather in a continuous stream than in the jerky manner of the larger branches: this independence, then, of the capillary circulation upon the heart, together with the altered manner of movement at the point where such independence commences, might be taken rather in proof of, than an argument against the doctrine of arterial action; but still we find in both sides of the ques-

tion, considering it as an abstract one, considerable difficulties; and the great problem respecting the actual *quo modo* of the blood's transmission from, and reception into, the source and centre of circulation, remains yet unsolved.

It is a curious fact, that the arteries of a larger size are found empty after death, while the smaller vessels of this order and the veins are filled with blood. Now it would appear, that the full explanation of this fact, could it be obtained, would, in some degree, be a solution of the difficulty just adverted to, in reference to the reception of the blood by the venous extremities. It has been ingeniously conjectured, that the resilience of the lungs, by causing a vacuum, thus withdraws the blood from the larger arteries and occasions their emptiness; and although this exposition of the circumstance fails in some of its explanatory links, it should seem probably correct in its main bearings; and there is a further probability that the circulatory has a further and different connexion, even during life, with the respiratory function, than has hitherto been traced. We know that the two functions have a very important relation the one to the other; we know that decarbonized blood, decarbonized by its exposure to the air in the lungs, is more stimulating, and altogether possessed of different properties from the fluid laden with carbon; yet still much is wanting to be ascertained, both in the chemistry and the mechanism of the respective functions, before we can predicate any near approach to perfection in this part of physiological science. That the blood, in some kinds of asphyxies, is both retained in the arteries and retained also in a fluid state, would seem to argue, that the usual condition of blood and vessel found upon *post obit* examination, has reference to something further than the mere cessation of the heart's living momentum.

Pulse. The phenomenon of pulsation seems to be referrible to the successive jerks of blood thrown into the artery by the heart, and it may be conceived to take place without any regular or muscular systole and diastole as in the heart; the impulse communicated to the vessel by that portion of blood which is propelled into the arteries coming in contact with the antecedent columns being sufficient to explain it. In the capillaries, and in the veins, this succession of impulses becomes lost; and hence in these the blood is, as I have said, carried forward more in the way of regular stream, and here a greater call is made both upon the contractile power of the vessel itself, and the assistance of contiguous muscles.

The average number of pulses in the adult is from 70 to 75, at puberty about 80, towards the end of the second year 100, and in early infancy from 120 to 150. These numbers, however, are subject to great variety, both from constitutional temperament and external circumstance. When the ordinary standard is much interfered with, disorder is present. Some contend that there is no necessity to take cognizance of any variation in pulses beyond those of number; while others have dwelt upon variety in pulsations with ridiculous precision and minuteness. Hardness of pulse certainly demands notice; it is marked by a vibratory and want of free feel in the arterial beat, and denotes inflammatory action; it would seem to be occasioned by the fibrous and elastic tunics of the vessel not acting in unison. A fulness of pulse, too, is sometimes plainly recognizable, and often indicates a fulness of vessel disproportioned to contractile energy. Smallness also, as especially opposed to fulness, is a condition of the pulse that it is of consequence to notice; and deviations from regularity, as denoting either organic or impulsive derangement, need scarcely be pointed out as proper to

recognize. “The Chinese mode of judging from the pulse is, to compare the number of pulsations of the artery with the intervals of the respiration of the patient. The number of pulsations of a man in moderate health, they consider in relation to the time of a natural inspiration and expiration. Four beats of the pulse, during this period, they consider as indicating perfect health. If it exceeds five pulsations, it is considered as too quick; if under that number as too slow, respecting good health.”

We now proceed to speak of the derangement to which the circulation is obnoxious. By turning to the Nosology, the student will see that Dr. Cullen’s first class of diseases is entitled *Pyrexia*: that under this head are included the five orders of *Fevers*, *Inflammations*, *Eruptive disorders* of an acute kind, *Hæmorrhages*, and *Fluxes*; and in slightly going over the pathology of the circulating organs, each of the above kinds of morbid being will fall before us for notice.

Pyrexia, that is, a state in which the heat of the body is preternaturally increased. How is this brought about? Could any one give a satisfactory reply to this query, such reply would form a better ground-work than we yet have for physiological and pathological structure. “When the chemical changes that take place during respiration had been enquired into, and when it was found that the capacity of carbonic acid for heat was less than that of oxygen, it was supposed that the conversion of oxygen into carbonic acid gas was the cause of the rise of temperature; and as the heat of the lungs does not exceed that of other parts, it was asserted that the air was absorbed by the blood, and that the production of carbonic acid, and consequent evolution of heat, took place gradually during the circulation. To these opinions, many strong objections have from time to time been urged by different phy-

siologists, but their complete subversion followed the researches of Mr. Brodie (Phil. Trans. 1812.), who found that the heart was capable of retaining its functions for some hours, and of carrying on circulation in a decapitated animal, and consequently independent of the influence of the brain, when respiration was artificially carried on. Under these circumstances it was observed, that although the change of blood from the venous to the arterial state was perfect, no heat was generated, and that the animal cooled regularly and gradually down to the atmospheric standard. In more than one instance, the expired air was examined, and found to contain as much carbonic acid as was produced by the healthy animal: so that here circulation went on, there was the change of oxygen into carbonic acid, and the alteration of colour in the blood, and yet no heat whatever appeared to be generated."

Since, then, we are considerably at fault on the subject of vital temperature, even without reference to disease, it follows that to account for the increase of heat as health recedes, must, indeed, be a task abounding with difficulties; and perhaps very little more at present is known on this point, than that an augmentation of exterior and internal heat accompanies the excitation of certain superficial or interior movements. Indeed, heat from motion, and cold from quiescence, are laws of inorganic matter; so much so, that some philosophers have considered the introduction of a subtle material, as the essence of heat, to be not only gratuitous but unnecessary, and have maintained, that heat, like every other incident of bodies, is but a manifestation of altered form or circumstance in the body; and although inorganic and organized being are regulated by different laws, we see and know enough of the latter to be convinced, that action and heat are in some measure connected, even in it, in the way of cause and effect.

But let us, dismissing this intricate subject, say a few words in succession of the several morbid states above enumerated, viz. Fever, Inflammation, Eruptive affection, Hæmorrhage, and Flux. The order, however, of the two first, for reasons which will be obvious as we proceed, I shall reverse. We are then called upon, in the first place, to speak of *Inflammation*.

When remarking on the circulation, I stated that one of the arguments adduced in favour of an independent motive power in the arterial system, was taken from the circumstance that partial distributions of the vital fluid may have place, without, in the first instance at least, the heart itself being changed from its steady course of regular procedure. Thus, in a given spot, say on the body's surface, an increased quantum and momentum of blood shall be discoverable; this augmented momentum and excitement shall bring with them increase of heat, and eventually all the phenomena shall manifest themselves, to which the term inflammation would be applied, merely from topical or local causes, the heart and other parts of the vascular organization only then coming to be affected when the commotion shall have excited what are called sympathetic or secondary irritation. But inordinate action and consequent heat do not of themselves constitute inflammation. In the formerly adduced instance, viz. that of a blush overspreading the cheek, we have both the one and the other; but who ever thinks of calling this inflammation? Of what, then, is the actual state really constituted? Let us suppose another case of increased vascular action. Let us imagine the eye to be suddenly and unexpectedly subjected to an undue quantity of light; inordinate excitation is the immediate result. In other words, the fibres of which this organ is composed are for a time irritated into more vigorous movements than is

ordinarily the case, the volume and force of its circulation are rendered more abundant, and visual perception is in the same ratio increased. Even in all this, however, there is no inflammation; there is augmented but not deranged action; the *error loci* of the schools has not taken place; the component parts of the blood preserve their proportionate relations, and the ordinary standard of circulating power is shortly restored, without the intervention of organic derangement.

But let the stimulus be applied with more force, or under greater than usual irritability of the organ, a different state of things will soon commence; the blood-vessels, which are usually colourless will now be seen conveying red blood, new secretions will take place, and in the course of a short time new parts or vessels will be actually formed. If, then, we are asked for a definition of the inflamed state as opposed to mere excitation, or mere fulness of vessel, we reply, that it is such excitation or such plenitude carried up to the extent of actual derangement; the capillaries do not merely momentarily receive, but positively and permanently circulate an unhealthy quantity of blood, while this break-in upon her orderly course, nature will not permit without immediately setting about the work of regeneration, in order to be ready, as it were, for the breach that is about to be made.

Actual inflammation, then, we hold to be disorganization to a certain extent, and we are forthwith to investigate its *modus generandi*. If we commence with the postulate, that inflammation implies the introduction of more blood into minute vessels than nature destined them to convey, we set out with the supposition that the resisting energy of these vessels has been overcome; inflammation then may be said, in one sense, to result from, or in its manifestation to be connected with, capillary weakness, under

whatever circumstances it shall occur. Such weakness, however, may at one time be primary and positive; at another, secondary and relative. Let us illustrate. Two individuals differently circumstanced as to constitutional stamina shall be the subjects at one moment of inflammation of the liver; now, although the degree of disorder may be abstractedly equal, and the morbid state shall have even depended upon the same cause, nevertheless the actual character of the resulting derangement will be found materially to vary.

In the instance of liver affection taking place when the subject is in a state of high excitement, and general vigour, the *error loci* has resulted from the morbid force, the *vis à tergo* energy, with which the blood has been made to rush through the substance of the organ implicated; the tonicity or resisting faculty of the vessels has been vanquished by a superior power; the smaller or capillary branches are rendered pervious to a greater quantity of blood, than is consistent with their healthy functions, and active inflammation is established.

When the tonic of the vessels, from whatever cause, has been lessened below its due grade, it follows that the same effect as far as *error loci* is concerned, may be produced without any increase of impetus in the circulation: in this case inflammation is induced in another way, and to this state of things, the term passive inflammation with some propriety has been applied.

Why in either case there should be the resisting and repairing actions set up which we have above adverted to, there is no possibility of explaining, beyond an appeal to final cause, and this *Deus intersit* language ought never to be introduced when the subject is not morals nor religion, but physiology and physics. What, it has been justly remarked, does John Hunter's "stimulus of necessity," as

applied to the blood's coagulation, amount to, more than that the blood coagulates because it must coagulate?

If there be any correctness in what has been above advanced, in reference to the essentials of inflammation, it would seem, moreover, to follow, that the dispute is somewhat idle and unmeaning, whether inflammation be weakness or strength, action or torpor, obstruction or other impediment: it is all and every thing as the general frame and local incidents shall vary; and both as to pathological essence and practical indication abstract views ought to be kept as much as possible from influencing judgment. We shall afterwards have occasion to see that stimuli are called for under some circumstances, and anti-excitants under others; the disorder being nominally the same, nay, that both principles may be brought correctly and beneficially to bear upon one and the same condition.

To follow inflammation out into all its consequences is rather the business of surgical than medical pathology; the physician, however, is called upon to trace the modes in which it usually terminates; these have been generally said to be resolution, suppuration, and gangrene. The term resolution is meant to express that recovery from the disordered state, which is effected without the intervention of any disorganising process. But this event, strictly speaking, is perhaps impossible; since the existence of the derangement implies, as above intimated, some degree of disorganisation. The most simple case, then, of resolution supposes a degree at least of absorption; and it is probable, that the remedial agents that are had recourse to, under the notion of subduing vascular action, effect their purpose, in part, by giving an impulse to the absorbing faculty. The readiness with which adhesion takes place under inflammation, between membranes that are

in apposition, is a proof of the rapidity with which inflamed vessels pour out lymph; and this lymph, if not again taken up into the circulating mass, often becomes organized in a very few hours; a process this, which is one of the most remarkable in the whole circle of animal movements.

If, however, inflammation be not subdued, or effusion have not taken place to such an amount as to resolve it; or it may not have terminated by this new and adhesive action; suppuration, or the formation of pus, is the next step in the process. On the manner in which pus is formed, opinion was exceedingly vague up to the time of Dr. Morgan and Mr. Hunter. Even Pott talks, in his estimable works, of the solid parts being melted down so as to form pus; and what is still more remarkable, the first lines of Dr. Cullen, continue to be printed with the expression of this sentiment, as to purulent formation. It has now come to be pretty generally understood, that pus is, somehow or other, a secretion from the vessels which have refused to yield to repellent agents; but a great deal remains still to be known on the precise condition of vessels by which it is produced. Indeed it is engendered under different states of the vascular system, and although it is usually a consequence of inflammation, it sometimes seems to be the result of an irritative action, which is under the grade of positive inflammation; as when it is secreted from mucous surfaces after a long continuance of chronic, but not truly of inflammatory, ailment.

Gangrene is, in fact, the death of the part which the disorder implicates; the rush of disease has proved too much for the organs to bear; the living re-action has failed of accomplishing its purposes; "and the laws of animal chemistry, thus far held in subjection by the su-

perior sway of the living power, acquire an ascendancy ; a play of chemical affinities takes place, and putrefaction or a decomposition of the organized substance; and a restoration of its constituent parts to their elementary forms necessarily ensue."

Of inflammation in its specific varieties, opportunities will occur to treat as we pass over the nosology. We now proceed to the general consideration of *fever*. This word, in its extended application, constitutes a curious example of the principles upon which nomenclature is founded in medical science. Observers of morbid phenomena could not have been long in ascertaining, that in some deviations from health, the heat of the body is preternaturally increased ; and, connecting this leading and characteristic effect with a vague idea of causation, they thus made a single symptom in a manner expressive of a whole cause. But as animal heat, or the temperature of the body, is equally augmented under very different circumstances of the frame, it became necessary to seek for epithets further expressive of these varieties ; and hence the adjective, nervous, bilious, inflammatory, putrid, are attached to the generic term fever ; with what propriety, I am shortly to aim at discussing. I am first briefly to treat of fever's essence or rationale. That local condition of vessels to which I have above adverted under the term inflammation, never takes place to any great extent, or lasts for any length of time, without giving rise to those irritative actions throughout the whole frame by which, or in conjunction with which, (to avoid language expressive of cause), the heat of the whole body is increased. In this case, a sympathetic or symptomatic fever is said to have taken place. But it is not always that fever, or an increase of heat, is traceable to

these local circumstances; and when it is not so traceable, the disease is named in the schools idiopathic, as contradistinguished from sequential or symptomatic fever.

We know not the reason, even when there is local affection, that such topical disturbance should mount up to systematic derangement; but when the derangement occurs without such commencing point, or starting-post, as it were, we seem to be placed in more difficulty on the score of pathological explication. This last difficulty, indeed, some pathologists, more especially of recent times, have endeavoured to prove dispensable: they maintain, that fever is in reality *always* a symptomatic expression of partial disturbance, although the local derangement shall not in all cases be the actual subject of perception. But these theorists do not agree among themselves, as to the first local link in the chain of morbid process. Some tell you it is the brain; some, that it is the mucous membrane lining internal surfaces; some, that it is the external skin; some, that it is the nerves; some, that it is the blood-vessels; some, that it is the ventricular; some, that it is the hepatic organ. Some talk of spasm and obstruction in extreme or small vessels; others, of congestions or infarctions in large ones; but all fail in conveying to the unprejudiced and unsystematic observer, a satisfactory *exposé* of actual circumstance.

A febrile paroxysm consists, more or less distinctly marked, of rigor, then of heat, and lastly of perspiration; but in tracing the rationale of these several steps, we find ourselves involved in much that is obscure and perplexing; and that partly in consequence of the ignorance to which I have before adverted, in regard to the laws by which both actual heat and the sensation of heat, are instituted and exercised in animal existence. The disturbance, however, of the corporeal movements by which

the first link of fever is constituted, whatever be its actual and precise nature, seems, as before hinted, to be a something which at one moment, *in uno citu*, as Fordyce expresses it, runs through the whole fibres, and textures, and functions of the sentient organisation; it is a shock to which succeeds the rigor, which rigor, though expressed by the English term shivering, is not exactly the same sensation as cold, although it is more like it than any other sensation; and to account for the sudden generation of cold, would be in some measure to account for the feeling in question. There is in the shock and rigor of fever a sudden induction, as it were, of quiescence, a temporary suspension of the ordinary movements; and hence seems to arise the perception. It is a curious particular, as remarked by Fordyce, that the power of diminishing heat, without such heat being given out to surrounding media, is common to the first stage, or preliminary quiescence of fever. The body seems, in a manner, to lock up its own heat; or, more properly, perhaps, speaking, by ceasing for a time its action, ceases in the same ratio to engender or manufacture heat. We probably, then, are permitted to go thus far in the explanation, *viz.* that an abrupt suspension of vital forces, occasions the generation of cold, and causes that shrinking and contraction of the extreme vessels, which, in the schools of Hoffman and Cullen, was named spasm, a term and notion which, although much ridiculed in the present day, do not appear to have been succeeded by any more intelligible language or satisfactory exposition. To this, the hot stage soon succeeds. The blood rushes into the previously contracted vessels, and all is now activity and heat; and in this, the hot state of fever, it has always appeared to me, that phenomena present themselves inconsistent with the chemical theory of animal temperature, even had we

not been furnished with the refuting experiments of Mr. Brodie, before alluded to. During the heat of fever, there is often much less change effected in the pulmonary organs than while the body is free from disorder. Nay, the breathing an oxygenous and vivifying atmosphere will often serve to cool, while azotic or carbonaceous air will heat the body; this is so conspicuously the case, that some have proposed as, in part at least, an explanation of fever's essence, the circumstance of carbonaceous rather than vivified blood circulating through the brain, and producing the sensorial and other disturbance. Be this as it may, we certainly are compelled to ascribe the morbid heat, under the affections supposed, to a derangement in the sentient faculty, and to the commotion which the disorder induces, rather than to any decomposition of the air which the individual respires.

Perspiration is the final stage of a febrile paroxysm; and it becomes a question, how is this brought about? and upon what principle is it that synchronously with the production of sweat the body's temperature is reduced. The physiology of perspiration, as well as that of animal heat is still, it must be confessed, involved in much darkness. At the time when the pulmonary theory of animal heat was generally admitted, it was ingeniously conjectured, whether perspiration is not in all instances the converse of respiration in regard to its agency in the system; or, that as the lungs are the inlets of the calorific principle, so is the surface the medium through which the heat is prevented from rising too high. "That an animal possesses to a certain extent, the faculty of rendering sensible heat latent, or to speak more philosophically, of reducing caloric from a free to a combined state in cases in

which the stimulus of heat might otherwise overpower the living energy, there is reason to believe, from a variety of experiments and observations; and that this is in part performed by perspiration from the surface, can scarcely admit of a doubt. The process of perspiration, which is continually going on from the surface of the body, is, in this point of view, the converse of respiration. As, in respiration a gas is constantly converted into a solid or fluid, and thus heat is evolved, so, in perspiration a fluid is constantly converted into vapour, and thus heat is absorbed. A vessel filled with water and exposed to the atmosphere, cannot be raised above 212° of Fahrenheit by any quantity of fuel, because as heat is supplied from below, evaporation carries it off from the surface; in like manner we may suppose the heat of the living body to be kept uniform, by the evaporation from the surface increasing or diminishing according to the quantity of heat extricated from the system, or received from the surrounding media."

To a certain extent, this doctrine of perspiration being thus a regulator of heat, may be admitted. But it ought to be recollected, that we have agents that are capable of reducing the heat of the body without first producing sweat; and Dr. Currie himself admits, that from some experiments in the hot-bath, it appears that the temperature of the body is with difficulty increased after the sweat begins to flow, although there is, of course, no evaporation from the surface, while the body is immersed in hot water. Our theorist meets the objections which start up from this source, by supposing that perspiration is a cooling process even in its being engendered internally, and before it breaks out upon the surface, from the fact of this fluid having a greater capacity for

heat than the blood, and thus absorbing or reducing temperature in the immediate act of its formation. By Dr. Alexander and others, it has, however, been said, that the process of secreting or forming perspirable matter is going on as freely during the height of febrile heat, as when the body begins to cool; but absorption and exhalation being in greater activity, the matter of sweat does not appear on the skin, but is in part re-absorbed and carried into the circulation, and in part dissipated in the atmosphere. We know, moreover, that many agents prove refrigerant without proving in the same ratio, if at all, diaphoretic; and, upon the whole, we must conclude, that as in the instances of natural and morbid heat, so in the case of its modification and reduction, there is still much that cannot be explained upon the assumptions and inferences of animal chemistry; and that vital actions and sentient impulses must be received into account before we can take one secure step, in the way of tracing the rationale of function.

Why, it is natural to enquire, does not sweat immediately result upon the re-action and heat of fever? Why does the surface for a time pertinaciously retain its dryness and heat, and then all at once give way and become bathed in perspiration? For, suppose we allow the correctness of Dr. Alexander's reasoning above alluded to, even then we must admit, that the excretories of the surface are in a different condition while pouring out sweat that is retained and appears, than when under the condition of dry heat. The Cullenian theorist would say, that the rush of blood and newly excited action eventually succeed in dissolving the surface spasm, and thence the resulting phenomena; but, besides that this is saying it takes place because it does take place, we must

suppose the solution of the spasm, or the giving way of the contraction in the extreme vessels prior to the full establishment of re-action. Dr. Park has lately endeavoured to refer these circumstances to a similar law with that which takes place in some of the hollow muscles, as of the bladder and rectum, in which the sphincters or outlets always act in opposition, as it were, to the organ itself; when one is in a state of contraction, the other is in that of relaxation, and *vice versâ*. In consistency with this principle, he says, that the exhalents may be viewed as furnished at their extreme points with a species of sphincter agency, and that when the vessels themselves give way before an inordinate rush of blood, the extremities contract to retain it, and that this contraction only ceases when the retaining power of the vessel is stretched to a certain pitch; as we micturate of necessity when the urinary bladder is full. Is not this hypothesis open to the following objection, even if otherwise tenable? That it supposes the capillaries to be organs of mere retention and transmission, not as they in reality are actual secretory vessels. Were it the mere rush of blood that the shut mouths of the extreme vessels retain, the discharge, when the constriction is overcome, ought to be blood, or at least the thinner parts of that fluid, and not, as it proves, a new secretion.

But is fever, the question still recurs, a local or general disorder? Does it happen as a consequence of some primary irritation falling upon a *part* of the body, and in this way producing a series of associate actions differing from healthy movements; or, is the first impulse made upon the totality, as it were, of the frame, the perturbed movements being nature's hurried efforts to set all to rights again, as the surprised soldiers of a suddenly be-

sieged town would hurry some to the citadel, some to the outposts, and some they know not where, but all intent to repel the attacks of the enemy? *

It has always appeared to me that those theorists who will have a local origin of fever, as lords to rule over them, overlook too much what is of every-day and ordinary occurrence in the way of febrile induction, without the perturbation to which I allude becoming so forcible or permanent as to engender positive or specific fever. If I am subjected to a certain quantum of fatigue, or if things about me become hurried and irregular instead of due and orderly, I become feverish, my skin is hot and dry, my spirits depressed, and my thoughts and perceptions confused. Now, another individual, not perhaps more robust than myself, shall be exposed to the same source of derangement, but shall either not at all be affected, or shall be affected in a different manner — what would break down his energies, would lock up mine — what would exhaust him, would confuse me. Withdraw the morbid excitants in either case, and my restoration shall at least be as speedy as that of my friend. Have, then, my brain or mucous membranes been *inflamed* un-

* Although in some sort, design seems to be implied in the re-acting movements, connected with deranged impulses, theorists ought to be especially aware of introducing the idea of motive into their explanatory phraseology of function; a want of precision in respect of distinction between the excitants of action has introduced much confusion into the philosophy of organized matter: when, therefore, I talk of “repelling the attacks of the enemy” I would be understood merely to confine myself to a statement of what takes place. Physiology and poetry, and ethics, are distinct things, and demand each a respective appropriation of term and predicate.

der this condition of things, or has any local mischief been brewing, which shall thus have been speedily dissipated? Is not the more consistent explanation of the affair this, that the whole machine has *at once* fallen out of its consentaneous order, and demands to be re-adjusted before actual health can be predicated? And the same principle would appear to apply, and the same process, but in a more marked manner, to take place when the exciting causes act with more intensity, so as to produce real and lasting, in the place of ephemeral and slight, disease. Does inflammation never take place in fever? Most certainly it does, and that very frequently too; but the inflammation, whether of the brain, or the membranes or viscera, is not primary and characteristic, but secondary and incidental. The identifying, then, of fever and inflammation is an instance of modern generalization which does not appear to me to be countenanced by fact. I shall be asked what is the difference between pneumonia or inflammation of the lungs, and fever, and I must confess the question presents some difficulties, in reference to febrile pathology altogether; since, if we say that inflammation of the lungs is a local, while fever is a general disorder, it may be replied that a general commotion, marked by shivering and shrinking often ushers in the one as well as the other. The truth is, I believe, as I shall afterwards have occasion more particularly to point out and illustrate, that the idea of local disease altogether has been too loosely admitted, and that topical is, for the most part, a mere manifestation of universal affection. Still there is a distinction between fever and inflammation. Who has not observed, for instance, how different inflammation of the lungs and its attendant fever is from fever and its attendant inflammation of the lungs? In the latter case we have the *languor cum arteriarum pulsu inordinato*

of authors, the peculiar animal depressions that characterise genuine fever; while, in the other case, there shall be the height of topical pain and systematic disturbance, without this attendant expression of sentient or cerebral disorder. "Cerebral disorder," would one class of systematics repeat after me, you have now conceded to us all that we desire; we contend that inflammation of the brain, and fever, are one and the same thing, and you in terms have subscribed to our postulate. Not so. Brain disturbance is very different from brain inflammation; and, although the febrile state very frequently indeed becomes a real inflammation of the encephalon, it does so merely from the circumstance of the sensorial organ being the organ most implicated with the deranging influence, and thence most vulnerable to the attacks of veritable inflammation.* In a word, and to conclude, that species of deviation from the healthy standard to which nosologists have applied the term fever, is a consequence of an hitherto undefined, or at least unexplained, derangement of the nervous organisation, manifested by sensorial disturbance and vascular irregularities, to which, for want of more precise notions and definite conceptions, the words

* Were fever inflammation of the brain, it could not subside, as it often does, in a moment almost of time, after a long continuance, without leaving any traces behind it of organic mischief. Had it been inflammation that was going on during the long protraction of continued fever, the common and necessary consequences of inflammation could not fail of invariable manifestation. Fever, it is readily allowed, does very often, indeed, induce topical and chronic ailments, and, in these cases, a species of inflammation has grown out of the original disorder; but events of this kind are not uniform, and the topical sequelæ are not always in the head.

spasm, and inflammation, and congestion have been applied, with some degree of rectitude it must be admitted, but still with an objectionable freedom and decision, inasmuch as, after all, even allowing the legitimacy of the terms, they are but statements of results and incidents, while they lay claim to developments of source and essence.

Exciting causes of Fever. Whatever difficulties are attendant upon the rationale of fever's production, it might have been expected that by this time the sources of the diseased state should have been accurately traced and definitively settled. But this is not the case. Nay, up to this moment, controversy is alive and active upon the question of exciting causes, and sentiments the most opposite and contradictory are daily issuing from the press on this interesting topic — interesting, inasmuch as its being set satisfactorily at rest would be the advancement, very far towards the solution of another problem in medical science, *viz.* What are the kinds and species of fever? Some will tell you fevers, whatever types they assume, are one and the same thing; and that there is no difference, but in the imagination of the nosologist, between the virulent plague of the Levant, and the low fever of a London alley. Others, again, divide and subdivide to an enormous amount, under the feeling that every new modification of the ailment, in acknowledging a distinct source, demands a distinct appellation. Here, as in almost all disputed points, we perhaps shall find truth taking its stand at about mid-distance between the poles of contention. It is the opinion of some, that genuine fever never can originate without the agency of what is called contagion; others, on the contrary, as I have before intimated, go so far as to deny the existence of contagion altogether, except among a few specific distempers; while a third party

are ready to admit contagion as an agent in the production of fever, but at the same time contend that the disorder may be elicited from other powers, such as the undue operation of cold and heat, famine, repletion, filth and mental agitation.

What is the meaning of the word contagion? It is, by the general acceptance of the term, a something which, coming in contact either immediately or intermediately with the body of an individual previously in health, engenders a disease in that individual of a nature precisely similar to its own — it implies, in a word, specific poison. What is infection as opposed to contagion? If I take a journey to Constantinople while the plague is raging in that city, and if, by consequence of my residence there, I fall sick of plague without having come in contact in any way with the matter that shall have emanated from the body of another person who is the subject of plague, I receive an infectious malady. Here, then, is the difference between an infection and a contagion — that the one is atmospherical or only through the medium of the unhealthy air communicable, while the other implies communication, either direct or indirect, with a something issuing from the body of the sick. In either case, indeed, a contact with a poison is, strictly speaking, supposed; and hence there is some impropriety in basing the notion of difference upon the assumption of different operation. I am disposed to think, indeed, that much of the intricacy that attaches itself to the question of contagion and infection originates in this very source; that is, a variety in *modus operandi* is presumed which is really non-existent. Let us imagine that a patient dies in the Levant of the disease called plague, and that the clothes in which he died are conveyed to this country, enlured with the poison of plague. An inhabitant of our metropolis procuring and

putting on these clothes might be affected with a certain dose, if I may so say, of disease; but still, though the virus might be as active *in se* as, had the same appropriation been made of the habiliments at another quarter of the globe, yet the resulting distemper might, nevertheless, be various — and in that case, you would say of the individual that he had taken an infectious as well as a contagious distemper. In this way, then, the question may be viewed as standing out in a tangible form. Is there any reason to believe that some disorders are entirely of an abstract nature, dependent solely upon their several exciting sources, without reference to time, place, or circumstance? or does the modifying power of place always, to some extent, operate upon the nature and aspect of a distemper? For my own part, I am disposed to think it does, so that, although in one sense I incline towards the sentiments of the anti-contagionist, I, in another, recede from his inferences, even much further than does the contagionist himself; for I believe, that from the most decided case of small-pox, down to a nursery cold, there is something communicable in the maladies, and something operative in the atmosphere.

To this day, physicians are in dispute whether the small-pox, and other specific contagions, as they are called, were known to the antients; and, while the majority feel inclined against the supposition, Dr. Willan has brought forward a great deal of learning and argument to bear upon the affirmative side of the question. But probably the disputants are both right and both wrong. It should seem, I think, most probable, that we have in fact no new diseases, but that the small-pox of this age and country is very different both in kind and feature from the small-pox of the antient Greeks — and that, were the world to last some two or three thousand years longer, this small-pox

virus, even without the modifying agency of vaccination, would come to be so changed as to afford the same room for controversy among posterity, in reference to our acquaintance with it, as we find to have taken place in this our day. "It is a curious fact (as I have elsewhere remarked in allusion to this subject) that Aaron, a physician and presbyter of Alexandria, who wrote in the beginning of the seventh century, has arranged the small-pox, measles, and pestilential bubo or carbuncle, as the product of one specific contagion; and very long after his time the two first (*viz.* measles and small-pox) were considered identical, and were, perhaps, actually so. But further, it is a very remarkable circumstance, that, since vaccine inoculation has become general as a substitute for small-pox, we scarcely ever see or hear of those eruptive disorders to which the term varicella or chicken-pox has been somewhat vaguely applied. The fact no one will dispute; but opinion does not seem quite so unanimous as to the explanation of which the circumstance is susceptible. Dr. Thomson maintains that all varioloid diseases spring from one source, and that the modified small-pox which so frequently follows vaccination, and the chicken-pox of former times, are in fact the same distemper rendered different in their complexional character by the present mild mode of inoculating—*inoculating* we say, for it would seem that even the genuine vaccine virus is but a modification of small-pox, disarmed greatly of its noxious powers by its having become the disease of a brute animal.

"There is another fact of importance as bearing upon the doctrine now inculcated; *viz.* that a *degree* of disorder will sometimes result from exposure to specific affection, without the absolute induction of the malady itself. Those who nurse children in small-pox, having had the small-pox themselves are not unfrequently the

subjects of a certain indisposition in consequence, which neither in kind nor quantity would be considered small-pox; and so on through the whole range of distempers to which the body is incident.

“ Again, who has not made the observation, that since our soldiers in *Egypt* became the subjects of ophthalmia, inflammatory, and other disorders of the eyes, but still not actual ophthalmia, have been greatly on the increase? The Walcheren fever too, although owning a distinct and peculiar origin, frequently sowed its seeds in the constitution of individuals, the fruits of which, when ripened in this country, bore a different character from that which they would have assumed, had the disease at once broke out among the Walcheren marshes. Such is the modifying power of time, place, and circumstance, considered even in phenomena that present themselves to our own observation; and it seems not unfair to suppose that the lapse of ages, the different habits of modern from antient times, may make disease insensibly branch out into innumerable ramifications from a very few roots.

“ Upon the whole, then, it seems probable that the distinction set up between contagious and pestilential (or between contagious and infectious disorder) does not, in truth, obtain to any thing like the extent commonly supposed; and that the specific quality of variola itself, is but different in degree, (it is allowedly greatly different in this respect) from the mere infection of plague. It seems that both are occasionally spontaneous in their origin—more or less communicable in their nature—pass from individual to individual in the same manner—and are susceptible of modifications to an almost incalculable extent.”*

* See a paper in the *Quarterly Review* on Contagion and Quarantine, written by the author.

“ Spontaneous origin ” — Here it is that much of what is obscure mixes itself with our researches and reasonings, as to the origin and decline of distempers. Let the plague, for example, break out and rage along the shores of the Mediterranean, and let it cease and recur periodically ; we are, in this case, disposed to ascribe the circumstance to a something in the atmosphere, although that something is not susceptible of detection by any means of analysis with which we are acquainted ; but when small-pox rises, proceeds, and dies away as an epidemic disease, it is thought that the seeds of the distemper have not been thoroughly eradicated from the district, and only awaited a fomenting power to bring them into act and effect.

In both cases, however, we rather presume than demonstrate ; since the precise mode of evolution, spread, and disappearance are, in either, equally hidden from our cognizance.

This deficiency in demonstrative evidence has given occasion to disputes about the origin of fever generally ; some averring that all analogy favours the inference, that no febrile ailment of communicable powers can be brought into being without a specific virus having been first applied : or, in other words, that atmospherical impurities, variations in temperature, mental agitations, stomach derangements, and so forth, never can do more than predispose an individual to be more easily acted on by contagion. And in the present state of our knowledge, this dispute, like that on spontaneous or equivocal generation, must make its appeal for decision to opinion merely ; to my conception, however, it appears next to certain, that common causes of derangement may, under particular circumstances of predisposition, come to engender a positively contagious fever. We may, perhaps, go further, and say, that some of the most peculiar or specific of the

contagious distempers are susceptible of production from ordinary sources; and that they may acquire or lose their specific shape and aspect by incidental circumstances. I have already, more indeed than once, cited the following as an apt illustration of the principle and fact now assumed. "A man of the horse artillery was admitted into the hospital with suspicious fever; next day another. This excited enquiry. It was found that they came from two different barrack-rooms. These were followed by other men, in all amounting to eight; three of whom came from a separate room, the rest from the same room. The rooms were visited by the commanding officer. All the rooms whence the infected came were found to have different beddings from the rest of the barracks. The horse artillery being a corps in constant readiness for service, and whose appointments were always complete, had, for the convenience of carriage, hammock-bedding. The hammocks were rolled up tight every morning the moment the men rose, and they were unloosed when they went into them again at night. At this time we had so much and such constant rain, that this bedding had not been opened or aired for a single day for at least two months. The hammocks, with their bedding, were examined, and the moment they were opened a very peculiar nauseating smell was perceptible. Immediate steps were taken, and no further mischief ensued. Thus an infectious fever evidently arose (the narrator means a fever capable of being communicated) from the confinement of the effluvia of a man's own person." Here then a difficulty presents itself to the contagionist of a most formidable nature, and which indeed seems well nigh insurmountable; unless he should say that the seminum of the fever was floating about in the atmosphere, and the process alluded to, by confining and concentrating, gave it at the same time activity and effect:

but surely the most natural, or least forced inference is, that the confined matter became the actual cause of the complaints; it would seem further probable that the communicated disease would assume different types and characters, according to the varied circumstances of the recipients; and we may, perhaps, carry this last supposition to the extent of conceiving that all the varieties which fever assumes are much more referrible to these circumstances, than to any abstract or specific difference in their exciting cause: a principle which, if recognizable as true, might have saved volumes of controversy on the contagious or non-contagious nature of yellow fever. Whoever heard of this fever in the north of Europe? and why does it not make its appearance in this part of the world? Not because it is incommunicable, for it is communicable; but because northern climes refuse to foster it. If we could suppose an individual transported with balloon-rapidity from the West Indies to the British islands, yellow fever being still upon him, he would either drop it altogether, as the slave does his bonds, or die of its violence, or have it converted into one of our own epidemics. With respect to plague, there is somewhat more difficulty about the explanation of its localities, since we know that this distemper has visited, and that too with most tremendous virulence, the land we live in; and although our comparatively great attention to cleanliness as a preventive may account, in a great part, for the recent immunity, it is to be feared, it does not *in toto*; it must, however, be allowed by the most strict advocate for conveyed contagion, that the accounts we possess of the prevalence of plague in England, admit, at the same time that the atmosphere of the parts in which it prevailed was vitiated by noxious impregnations. Flocks of birds occasionally were seized with death, as they were flying through the air. Beasts

were affected while grazing on the land ; and vegetation, by its sickliness, proclaimed the prevalence of an atmospheric poison. If such was not the case at Malta, and in other districts that have been more recently visited by the plague, let these be taken as facts on the opposite side of the question ; for I am not now reasoning as a systematic, but as one anxious for the establishment of truth. Upon the whole, however, I am of opinion, that dividers and subdividers of diseases have greatly erred in principle by giving an abstract essence to every modification of fever ; and that diseases are often radically identical, while in their ramifications and incidents they seem different ; that the disputes between the contagionists and anti-contagionists have been founded too much upon a *petitio principii*, and that the modifying influence of time, place, and circumstance is almost without limit. I am often asked whether this or that fever is a typhus or not, or whether it be or be not contagious, and I have sometimes surprised the enquirer by telling him that his question, in my mind, implies an ignorance respecting the laws which govern these things. A fever may be a synocha to-day, a synochus to-morrow, and a typhus on the third : provided the external circumstances, or interior conditions of the patient, tend to this variation in type : it may be contagious one hour, and not contagious the next, or from first to last it may be a typhoid, communicable, malignant distemper, and all this while the febrile excitant is the same.

But why, it may be said, does plague, does yellow fever, does typhus, visit certain places and districts at certain times ? and why does one particular district, which may be in the same latitude and seeming circumstance with another, prove, more than another, obnoxious to a particular form of fever ? On this head, we have nothing to assist

us beyond the mere facts of the case, and no examination of the air throws any light upon what are called epidemic atmospheres. Indeed, on all these points, there is much to learn, much to unlearn, and much probably that will be for ever hidden.

There is in all fevers a tendency to periodical accession and decline, but in some cases this is so complete and so marked, that the patient is left during the intervals in total exemption from the disorder: hence the term intermittent. In other instances, though the malady gives way in part, it does not wholly: fevers of this last kind are, therefore, termed remittent. Now, the intermittent shapes of fever have been observed much more frequently in marshy situations, or where shallow stagnant waters abound; and they have, on this account, been usually attributed to a poisonous exhalation or miasm arising from the decomposed materials of a soil thus circumstanced. Others have argued, that there is no necessity for interposing the notion, even here, of a specific poison; since the cold and dampness of the country are quite sufficient to account for the effect. When, however, we find that, in some situations not marshy, but otherwise unhealthy, intermittents do not, or but seldom, appear; when we see that the draining of lands from shallow stagnant waters has considerably lessened the frequency of these fevers, and when we recollect that the neighbourhood of deep waters, though equally cold, is not so insalubrious as that of a marshy vicinity, it appears to be carrying a disposition to generalise too far, to question the specific agency of marsh miasmata. But the influence of this, may be much modified by other agents, and in cases where we have very high variations and sudden vicissitudes of temperature, from the sultry day to the damp foggy night, and where, at the same time, the land is low and marshy,

there we meet with modifications of yellow and intermittent fever under the shapes and denominations of bilious remittent. Again, let these circumstances of soil and temperature operate in conjunction with animal decomposition, and the resulting disorder assumes more of what has been called a putrid type; still retaining some of the features either of remission, intermission, or yellow hue, that have been imparted to it by its other excitants besides that of the main and master one. Whether, then, we shall name all these fevers differently, as they thus assume various shades and modifications, becomes, in some measure, a dispute about words, only, that it is important to recollect that these varieties are rather local, endemic, and incidental, than inherent, abstract, and essential.

We have gone beyond what may be considered all proportionate bounds, in our remarks on inflammation and fever; but we have thus engaged largely in their consideration, because our labour afterwards will thereby be considerably abridged, and because these two modes of morbid being are leading ones to which the frame is obnoxious; the remaining orders of the class Pyrexia will not detain us long.

Exanthemata. From ἐξανθήω, *pullulo*, *crumpo*. Diseases which pullulate, or bud, or break out, on the body's surface. Of these the theory is very intricate. I have already said, that from the blood of an individual labouring under virulent small-pox *we* can extract no noxious matter, but vital chemistry can and does; for it is from the blood, in some sense, that is, by means of the blood that the surface of the body is covered in small-pox, and other exanthematous distempers, with loathsome and pestilential matter. The antients made short work with the rationale of these disorders; they supposed a sort of

internal commotion of humours, which, after battling about for some time, settled on the surface, something after the manner of fermenting materials, which eventually come to subside into their respective localities: and averse, as we may be, from falling into these notions, now that the laws of secretion and excretion are more scientifically traced, we must still, nevertheless, admit that there is in the phenomena, which some of the rashes exhibit, not a little that justifies the crude analogies alluded to.

It is a curious fact, that the functions, and even structure of the skin (which one should have, *à priori*, supposed would be one of the first parts of the body to have its anatomy and physiology clearly traced) continue still to want the full substantiation of satisfactory development; and the pathology of skin disease becomes, in a manner, more and more intricate, the more it is made the subject of systematic investigation. To this topic we shall, however, again refer. It is only necessary here to remark, that Dr. Cullen confines his views of the exanthemata to those rashes which are not only attended with, but which are actually ushered in by fever, and it is through the means of this fever that the disease works its own cure; for it is hereby that a general determination is made to the surface, and the morbid poison is thrown off from the system.

“ When a febrile poison, producing a cutaneous eruption, is generated, or has been conveyed into the blood, a small degree of fever is sufficient to throw it upon the skin, and if it exceed the proper extent, the specific virus will be multiplied, and the fever itself may become a source of real danger. It was formerly the practice to encourage the fever by cardiacs, a heated atmosphere, and a load of bed-clothes, from an idea that we hereby solicit a larger flow of morbid matter from the interior to the surface. The fact is unquestionable; for be the exanthem

what it may, the skin will hence, in almost every instance, be covered with eruption. But it did not occur to the pathologists of those times, that the morbid virus was an animal ferment, capable of multiplying itself by accessories; and that heat and febrile action, beyond a very low medium, are among the most powerful accessories we can communicate. And, hence, the advantage of the modern practice of applying cold water in scarlet fever, and cold air in small-pox, with a view of mitigating the fever that often accompanies these diseases; for, by diminishing the febrile violence we do not, as was formerly imagined, lock up the contagion in the interior of the system, but prevent it from forming afresh, and augmenting there."

To this law, however, of moderating rather than abetting excitement, some limits must be made in theory and practice; and here it is of importance to remark, that, of late years, a connection has been traced between the actions of the outer and of internal surfaces, in special reference to febrile disorders that are expressed by rashes. The connection seems to be of that nature, which is denominated by Darwin reverse sympathy; which had long ago been recognized in the case of catarrhal irritation, but which has recently been more particularly traced and applied to the affections now under notice. Suppose the whole dermoid surface to be covered with a thick crop of eruptions, if you too precipitately arrest the morbid processes which these eruptions imply, you thereby cause the surfaces which line the interior both of the alimentary and aërial passages, to take on an action, at least somewhat similar, if not exactly the same as that which you have interfered with on the exterior. In some instances, this vicarious sort of connection is more marked than in others; but in all cases of skin activity, it is in a greater or less measure conspicuous. In all it requires to

be attended to in practice, and, indeed, in modern medicine, is so attended to, much to the credit of the science, and to the benefit of the patient. It may be right just to remark here, that the connection appears to have some relation, at least, to kind as well as degree; for, in the eruption of scarlet fever, and especially measles, though the cutaneous disturbance may not be nearly so great as in the instance of small-pox, the internal tendency upon either natural or artificial repression appears greater. It will be found necessary, in practice, to proceed under a recollection of this fact, and to be wary of bringing down the irritation on the surface with too much freedom, where the internal tendency to the vicarious irritation now referred to is thus conspicuous. But this is not the place for rules of practice.

Hæmorrhagiæ. Hæmorrhage, like inflammation, implies either absolute or relative weakness; that is, an inordinate impulse given to the blood occasions a rupture of vessels, in which case we have what is called in the schools active hæmorrhage; or else the vessels give way to the common excitants of the frame, and in this manner occasion passive hæmorrhage. It is proper, however, to take into account that an extravasation of blood by the hæmorrhagic effort, does not necessarily imply an actual rupture of vessels, since the impetus may be so great as to force blood through the terminal capillaries which open upon internal surfaces, and thus a very considerable profusion produced, while the vascular tunics retain their integrity. And in this case inflammation and hæmorrhage are not only analogous, but are actually the same thing; only that, where blood is thus poured out, the disease, in some degree, brings with it its own remedy, as far as the inflammatory process is concerned, although a new disorder is sometimes engendered by the cir-

cumstance of extravasation on parts which, having no outlet, are incapable of immediately ejecting the foreign matter.

Hæmorrhage was formerly conceived to have great dependence on external circumstance; that is, to be influenced by variations in temperature and aërial density; heat expanding the circulating blood beyond its ordinary tenuity, and the varied states of rarefaction in the air causing a varied condition in the rarefaction, or condensation of the fluid, while flowing in its vessels; and, although the laws of physics and of chemistry are ever held in subordination and check by the commanding energies of vital forces, it is, perhaps, questionable whether the pathology of the present day is not too regardless of external agents in the rationale of internal processes. Hæmorrhage from the nose, and from the lungs, is not seldom induced by breathing an air more than commonly rarefied; and without going to the full length of Hoffman in notion and phraseology, when he talks “of orgasm, ebullition, and turgency of blood destroying the systaltic and elastic power of the vessel, and thereby inducing congestion, distension, and rupture,” we may at least subscribe to the postulate of some immediate change in the blood’s condition as caused by external agents, beyond the influence of these agents, as mere excitants.

When hæmorrhage takes place from obviously exciting causes, such as a flow of blood from the nasal membrane, in consequence of a blow upon the nose, or when a spitting of blood is brought on by violent exercise of the lungs, it does not seem very difficult to follow the steps of the morbid process; but the occurrence of spontaneous hæmorrhage, as of spontaneous inflammation, brings with it a little more of difficulty, in respect of explanation; and here we must have recourse to the idea of plethora, and to an irregularity in the blood’s distribution, arising

out of that state of system to which the predicate of plethora is applied. On the nature and essence of plethora much controversy has arisen; and, indeed, by some, the possibility is denied of more blood being at any given time in the body than the vessels can conveniently contain and carry. It is averred, that the secretory and excretory organs would take care that this should not be the case, and that the demand upon them is ever in proportion to the ingesta or matter received from without. But were these functions always thus true to their charge, very little of diseased action would ever be manifested; and the fact is, that the very tone of the system which produces appetite, free digestion, and, in consequence, occasions more blood and chyle to be formed, is that condition which contracts the blood vessels and the secernents at the same moment, and thus occasions a more than due quantity of blood to be contained through the whole of the circulatory organization. We know moreover that for the secernents and excretories to be kept in a due condition of activity, a certain quantity of exercise is required on the part of the individual. In default, therefore, of this exercise, a plethoric state may be induced; since the rest, in some conditions of vigorous stamina, may not be equal to causing a failure of appetite and ingesta. This species of plethora, if it be admitted, implies a sthenic diathesis, to use the phraseology of some pathologists; and, although in itself not disease, certainly predisposes to it, by rendering the system more obnoxious to the effect of the slightest, and otherwise scarcely operative irregularities.

But it is further conceivable, that the vessels may be overladen and over-distended, while the actions of the system are in respect to tonicity below, rather than above, the ordinary standard. In this case, however, the blood would be more tenuous, as well as in larger quantity; and

the morbid inclination would be more towards the next order of diseases, the profluvia; or rather it would be towards serous effusion and dropsical accumulation, on the rationale of which a few words will fall to be said under the class Cachexia.

If what I have intimated above, respecting temperature, and aërial changes, as inducing distension and discharge from vessels, be correct, we shall find another source and species of plethora, *viz.* the plethora *ad molem* of the schools, where the actual volume of the circulatory fluid is expanded. I should always wish, however, for the student to admit of these mechanical and chemical changes with reserve and limitation, and never to forget that vitality is the main regulator of organic movements.

Profluvia.—It is a law of secretion, that a certain quantity and kind of excitation communicated to the organs concerned in it, increases the natural discharge; but this inordinate discharge may be brought about by a diminution as well as overplus of excitation. Thus coryza from the nose, and tears from the lachrymal glands shall appear in superabundance from mere exposure to cold, which being a deprivation of heat is, in fact, a deprivation of stimulus: there would seem, at first, some difficulty in reconciling these “hot and cold blowing” phenomena, but the following explanation may be deemed sufficiently satisfactory. “The absorbent vessels become torpid by the diminution of the external heat sooner than the secerning ones, which are longer kept warm by the circulating blood, from which they select the fluid they secrete, whereas the absorbent vessels of the nostrils drink up their fluids, *viz.* the thin and saline part of the mucus after it has been cooled by the atmosphere. Hence the absorbents ceasing to act, and the secerning vessels continuing some time longer to pour out the mu-

cus, a copious thin discharge is produced, which trickles down the nostrils in cold weather. This discharge is so acrid as to inflame the upper lip, which is owing to the neutral salts with which it abounds, not being re-absorbed; so the tears in fistula lachrymalis inflame the cheek."

But there are circumstances connected with morbid activity in the secernent vessels which are exceptions in seeming to the more general one, of increased secretion being equivalent to increased excitation. In the first case a given quantity of excitement, or that quantity applied under a given state of the secerning organisation, shall arrest secretion or flow altogether. Shall we say here that both the exhalents and absorbents are in a state of increased action, but the absorbents have obtained the mastery in the contest; or shall we suppose, with Dr. Park, a sort of opposition between the small vessels and their sphincter extremities; or shall we confess at once that we have much of difficulty to grapple with, when we trace functional relation to exterior agents? Again the flux shall be continued by habit after all extraordinary excitation is gone by. By habit? What do we mean by this term? Merely a statement of fact; and it is really not easy to say why a thick ropy secretion should continue to be poured out from mucous surfaces, after the cessation of that cause from which the flux had primarily proceeded. The absorbents here would seem to do something more for the poured-out matter than merely drink up its serous and saline part; for the secretion often gradually changes in kind as well as consistence; and, at length, under particular conditions of the part and of the frame, slides, as we have before intimated, into purulent condition.

But additional remarks in reference to the secerning and absorbing powers will fall more consistently under the cachectic division of morbid state. In what has

already been stated, we have, perhaps, presumed too much upon the student's acquaintance with the assimilating and secernent functions. The animal system, however, is such an *imperium in imperio*, is constituted of such a complete cycle of connected and relative functions and faculties, that begin from whatever point you may, you always find yourself labouring under the disadvantage of obligation to suppose knowledge.

SENTIENT AND MOTIVE FUNCTION.

That those organs which we name nerves are the media of sensation, is as demonstrable as that the circulating blood is the pabulum of nutrition. It has been found, that when a nerve passing to a limb is injured, the power of perception and motion in that limb is interfered with; and that if a complete division be effected, the faculties of sensation and motion are entirely gone. But this is not all; injuries done to that organ, which is usually regarded as the great source and reservoir of sensation and volition, the brain, will occasion this suspension or diminution, or destruction of the perceptive and loco-motive faculties, without there being any actual, or at least visible, injury done to the nervous branch itself. When phenomena like these present themselves spontaneously, or without the intervention of an experimenter, we infer, that such phenomena have especial reference to the nerves or brain; and, in this manner is it, we conceive the existence of disease more purely and properly *nervous*.

In the nervous organisation, there are three parts which call for especial observation. We have first the brain enclosed in the cranium, and composed of the cerebrum, or larger, and cerebellum, or smaller brain; we have next the junction of both, and its continuance into a long and large mass down the back-bone; and we have, thirdly, the nervous branches either connected im-

mediately with the brain, or spinal chord, or intermediately with both. Now, the brain and nerves presenting this connected and continuing mass, have for the most part been regarded the one in a manner the source ; the other, the agents of sensation : but this view of the subject has been objected against by some modern physiologists, on the grounds, that the order of lessening is not observed as the nerves proceed, or appear to proceed from the brain, and from each other ; and that nervous functions may be called by extraordinary stimuli into exercise after all communication with the brain has been cut off. The objectors urge further, that the size of the brain is not at all in proportion to the spinal chord or to the nerves, which ought, they allege, to be the case were they continuations the one of the other. The brain, for instance, of a horse, an ox, or a stag, is smaller than that of man, while the spinal chord and nerves of these animals are, on the contrary, much larger ; and the instance of acephalous monsters is likewise adduced upon the same principle of objection against the notion, that the nerves proceed from the brain. They are rather in connexion and communication, say the theorists to whom we allude, than attached together in the way of production and procedure.

A difference, we have seen, obtains among speculators, respecting the mode in which the blood is urged over the round of circulation ; but there is still a wider diversity of opinion respecting the subject of perceptive and locomotive essence ; and it is to this hour in which I am writing an agitated point, not only what part the brain, what the spinal chord, and what the nervous branches perform in the business of perception, and sensation, and motion, and intellect ; but what share the different compartments of the encephalic and nervous mass contribute to these functions, either in conjunction or separately.

Bichat has suggested, that there are two general and somewhat distinct systems involved in the nervous organisation, and that the functions are capable of a broad division into those of animal and organic life; the first being exercised mainly through the medium of the brain and its dependencies; the second having principally to do with the ganglia of the great sympathetic nerve. Neither of these functions does he conceive to be absolutely exclusive, since there is a nervous connection between the brain and sympathetic. He believes, however, that the ganglionic part of the nervous organisation is devoted to the development of organic and involuntary functions, while to the encephalic belongs volition and intellect. There is this further difference supposed between the manifestation of the one and the other, that the nerves of animal life have a centre and source, which is the brain; while the organic system is so constructed, as that each ganglion has a separate and somewhat independent function.

In favour of these views it has been advanced, that those animals, which are so low in the scale of animated beings as to be without brain, which have only ganglia, possess, so to say, no individuality; a part of one of these existences is in a manner as complete as the whole; it possesses a separate and distinct vitality, which is not the case with those existences that are furnished with a brain. Take a member or part from the body of these last, and it very soon becomes subject to the laws of dead inorganic matter. It may be further stated, as a general fact, that in proportion to the possession and exercise of intellect, in that proportion is the brain large, and the ganglionic system less conspicuous. It has been asserted, that idiots in the human species, are found, upon *post obit* examination, to have the visceral ganglia of the sympathetic nerve much developed.

Dr. Wilson Philip's views are, in some degree, similar to those of Bichat. He supposes, however, a more decided connection between the ganglionic and cranial part of the nervous organisation. The origin of voluntary motion is, according to this physiologist, directly from the brain, and the power of muscles to act, is transmitted immediately to the acting muscle, from a certain portion of either the cranial or spinal brain; while, to the muscles of involuntary motion, the nervous influence, on the contrary, is sent through the great chain of ganglia, each muscle receiving its influence from every part of the brain and spinal chord.

Le Gallois also differs from Bichat, in respect of the connection between the cranial brain and the functions of organic life. So far from the organic system of nerves being independent on brain and the spinal chord, he supposes, that it receives from them its most powerful influence; and that sensation and motion, as they relate to the trunk, reside altogether in the spinal marrow; moreover, that the life of each part depends, especially, upon the portion of the spinal chord, from which it receives its nerves. The destruction of life by decapitation, Le Gallois imagines, to be effected by the deprivation thus occasioned of the respiratory powers. He does not, however, believe that respiration depends upon the brain, but upon a circumscribed part of the medulla-oblongata, near the occipital opening, towards the origin of the eighth pair of nerves.

Dr. Copland has endeavoured to shew that the ganglionic constitutes a distinct system from that of the cranial and spinal nerves; he has with great ingenuity traced the first efforts of organisation to ganglionic structure, and developed functional exercise in conjunction with ganglionic excitation.

Flourens, a more recent experimenter, imagines the spinal chord to be destined for the combination of muscular contraction into a concentrated totality, while the cerebellum regulates these movements; and the lobes of the cerebrum are the immediate organs of sight and sound, as well as the media through which all sensations receive a concentration and distinctness.

Magendie has still more recently suggested, that all the senses are under the influence of the fifth pair of nerves, and that the received theories of cerebral sensation altogether require to be altered.

Without going into the experiments, upon which each of the above hypotheses is based, we may remark, that there seems sufficient datum before us, from which to deduce the following inferences, *viz.* that the nerves proceeding from the cranial brain to the several organs of sense, are the nerves of perception; that those which arise from the spine, are the nerves generally of motion; and that the great chain of sympathetic nerve, formed by the sympathetic, usually so called, and the *pars vaga*, is that destined for the exercise, especially of the organic functions. The connection, however, of one part of the nervous organisation with another should never be lost sight of in our inferences from observation; and it is, to say the least, questionable whether each and all of the experiments on these subjects, be not instituted too much in the want of recognition of this totality.

In regard to that theory of cerebral functions, which supposes separate portions of the brain to be destined for the production, as it were, or manifestation of the several powers and passions, and talents and sentiments of the individual, I think a great deal of unmerited obloquy has been cast upon it; although, on the other hand, it must be admitted, that the phrenological and craniosc-

pical tenets have been too largely and loosely deduced from a too partial and insecure observance.

There has been much dispute among physiological and pathological speculators on the following question. Does that power of motion by which organised beings are characterised, depend upon a *vis-in-sita*, as Haller expressed it, that is, a somewhat inherent in the fibre; or is it more properly a nervous faculty, that is, supplied by the nervous organisation? The doctrine of the day seems rather inclinable to the Hallerian assumption, and to consider the nerves as rather the excitants than the cause of motion. Dr. Philip, indeed, conjectures, that there are three distinct faculties connected with the full display of vital causation, *viz.* the sensorial power, the nervous influence, and the fibrous excitability.

Another question has been, for a very long time agitated in the schools, whether sensation and motion are developed through the same, or through a different order of nervous fibrillæ? But the more general opinion is now, as it was among the antients, that the nerves of sense and motion are distinct: "We see, for the immediate purpose of *vision*, the optic nerves distributed in very minute ramifications over the retina of the eye, where they form a sort of nervous pulp; while the nerves for the various *motions* of the eye, the *oculorum motores*, the *pathetici*, and the *abducentes*, have no resemblance to the optic nerves either in their origin, their appearance, their course, or their distribution. The nerves of the organ of the sense of smelling, also differ in various respects from those which supply nervous power to the muscles of the nose. The pair of nerves, called auditory, consist of two parts, the *portio mollis*, and the *portio dura*, the first of which is distributed through the internal ear for the sense of hearing, whilst the other goes to

the external ear and face, for the purposes of motion. The muscles of the tongue are supplied from the nerves of the ninth pair, while those, which go to the papillæ of the tongue for the sense of taste, are derived from a twig, from the inferior maxillary branch of the fifth pair; and, in like manner, we find, as Galen has indeed remarked, that the papillæ of the skin, the immediate instrument of the sense of touch, are supplied with nervous power from sources very different from those which furnish nerves to the superficial muscles."

Magendie thinks he has made out that the posterior twigs of the nerves, and the posterior cords of the spine, are intended for conveying sensation; while the anterior twigs and cords are for motion. Mr. Charles Bell had some time since announced, in part, the same thing. "On laying bare, (he says), the roots of the spinal nerves, I found that I could cut across the fasciculus of nerves which had its origin from the posterior portion of the spinal marrow, without producing convulsions."

It must, however, be confessed, that in reference to the broad and general question, there are some facts which appear to favour one, and some the other side; and that absolute demonstration seems still to be wanting.

Do the nervous fibres decussate? In other words, is there a communication by a sort of interchange, or crossing of fibre between the two sets of nerves with which the body is furnished? Haller has actually demonstrated this decussation in the optic nerves of some fish. Dr. Sommering has even shewn a decussation of these nerves in the human subject; and Dr. Spurzheim remarks, "he has seen in different animals, that after blindness, which lasted for many years, the nerves of the affected side diminished in size as far as the union, that the change has continued from this point along the nerve of the opposite

side, and that the nates of the same side has been also considerably diminished." These and other observations have led to the inference, that throughout the whole cerebral mass, and nervous frame, there is this general crossing or interchange of substance, so that if I receive an injury upon one side of the head, the nervous branches of the opposite side will be the paralyzed, or otherwise affected parts, as the nerves of these parts are in reality the nerves of the opposite side of the brain.

Occurrences, however, occasionally present themselves, which would seem at variance with this construction and principle. You see for instance, in some cases, palsy or convulsion attack the side of the body corresponding with the side of the brain that has been injured: so that the law of decussation would not seem to hold good invariably. Drs. Gall and Spurzheim have attempted to explain this apparent inconsistency, by stating, that excepting in one part of the brain, all the fibrous fasciculi of nerves arise on the same side of which they become portions of the cerebral mass, and then the general communication of brain and nerves is on the same side, "but it is quite different (they add) with the anterior pyramidal eminences; the fibres of these eminences cross or decussate each other, each going to the side opposite to that from which it originates. Just at the spot where the medulla oblongata, or the great occipital enlargement begins to swell at its lower part, at one inch and a few lines beyond the pons varolii, let the arachnoid and vascular coats be divided by a superficial incision, not extending into the subjacent parts, and then be carefully removed. If then the edges of the groove which runs in the middle be gently separated, there are seen three, four, or five threads crossing each other, coming obliquely from below upwards, and occupying a space of about three or four lines in length.

The nervous threads, arising in the cortical substance on each side, pass respectively to the opposite side, so as to produce a decussation of the pyramids. This structure was known to some of the antient anatomists, as to Mistichelli, Petit, and Santorini especially; but it has been overlooked or denied by modern anatomists. It explains why some injuries of the head influence the opposite side of the body; and as only a part of the brain, namely the continuation of the anterior pyramids is in communication by decussation with the nervous mass of the body, it is evident, and easily understood, why palsy of the body, or convulsions produced by injuries of the head, are observed sometimes on the opposite, and sometimes on the same side."

Dr. Yelloley supposes the interchange to be effected in the whole of the pons varolii, since "this is the first link in the chain of communication between the encephalon and spinal marrow; and, since there is reason to suppose that the full effect of nervous influence is not produced till an union of the cerebrum and cerebellum take place."

None of these explanations are, however, quite satisfactory; since it appears that whatever part of the brain be affected, the consequences manifest themselves most usually on the opposite side, but sometimes this is not the case.

Theories of Nervous Agency. In the circulation of the blood, a palpable fluid is transmitted; in the lymphatic system also something that is perceptible is conveyed; but in perception or sensation, what is it that acts? What is it that is transmitted? A subtle fluid as the medium of nervous agency, analogy naturally suggests, but the objections to this supposition are, that the most minute investigation has not hitherto detected any tubular construction of nervous fibrillæ. The amazing rapidity too, with

which sensation is communicated seems, in some measure, inconsistent with the conception of a conveyed fluid; and more especially does it appear difficult to imagine, how the re-acting communication takes place on the notion of any matter directly transmitted; it is likewise of importance to recognise, that sensation, arising from impression on one part, is not necessarily felt through the whole course of the nervous ramifications; but there shall, as it were, be a communication at two distant points, the intermediate line of nerve being without any perception at the time.

The vibratory theory, advocated by the celebrated Hartley, is quite gratuitous, and not at all according with the manner in which the nerves are attached and distributed; and, with respect to the electric or voltaic theory of nervous influence, although I should feel as reluctant as any person to encourage that kind of reasoning, which implies an analogy throughout all its parts between living and dead matter, I cannot help conceding that Wilson, Philip, and others, seem to have proved that galvanism is something more than a mere excitant of the nervous power. Dr. P. takes a rabbit, divides the eighth pair of nerves, and the functions that are dependent upon this portion of the nervous system, immediately begin to manifest derangement. He stops this progress, and effects the same for the animal by galvanism, as he would by restoring the complete integrity of the divided nerves. Yet still to assert, that the galvanic and nervous impulses are precisely the same, is perhaps stretching the analogical inferences beyond a justifiable extent; for nothing that takes place in living matter can ever have its actual counterpart in the processes that result from modifications and combinations of existences destitute of vitality.

Pathology of the Nervous System. I have just said, what indeed does not require to be said, that the rationale of nervous agency, is in some sort a matter more out of the reach of our perceptive powers than that of the blood's circulation, or the transmission of lymph through its appropriating conduits. In the derangements implicating this portion of the frame, there will, of course, be found a corresponding difficulty attendant upon their divination. We see an inflamed part, provided it is on the body's surface, and we know that it consists of a disordered state of the circulatory power; at least we know, that in inflammation such disorder is present. In like manner, we can perceive the tumefaction of a disordered lymphatic gland; but there shall often be a deficient or morbid perception in a part, without the eye of the observer, or even the knife of the dissector being able to trace a corresponding difference, nay, any difference at all, in the organisation of the part, from that of healthy structure. When, then, we say a malady is nervous, we imply, that the faculty of perception is especially implicated; and having ascertained that the nerves are the media of that faculty, we infer, that these are the seat and source of the disorder in question.

But we are naturally discontented with mere inference, and are anxious for demonstration; and this anxiety (laudable, if not carried too far,) has seemed to me, occasionally to have introduced into modern pathology, a somewhat erroneous way of accounting for the origin of certain disordered manifestations. To the blood-vessels or the digestive organs, we fly for solutions of difficulties, because these seem to place their answers to our queries in a somewhat more tangible shape; but I am afraid we are ungrateful enough in return to charge them often with originating disease, of which they are in reality entirely in-

nocent; we too much overlook the fact, for fact I think it is however difficult of exposition, that independently of the assimilating or digestive organs and processes, and independently on the blood-vessels, the nerves will be brought into a condition of morbid being, occasioning an irregularity in feeling and function, which may be named in strict propriety a *nervous* ailment.

True it is, that by consequence of that intimate connection which exists in structure and office between all the parts of the body, an affection of the sentient organisation is very often soon succeeded by vascular and other disturbances; but even when that is the case, the blood-vessels or the stomach are not the only parts to be regarded either in our estimate of morbid essence, or the institution of curative indications. I have already had occasion to remark, that even pyrexial irritations have more dependence upon primary movements in the nerves than some explainers of diseases seem disposed to admit; and I think that the notion of pyrexial derangements, as being those of the blood vessels, is much more open to censure when properly exposed to view, than the idea of a class of diseases properly and purely nervous. If, indeed, there be any rectitude in the intimations above given, respecting the origin and true nature of febrile derangements, these ought, in strict propriety, to be taken from the first, and transferred to this, the second class of morbid circumstance; for there occurs, even in fever, "a preternatural affection of sense and motion, without *primary* pyrexia and without local disease."

Dr. Cullen's class *Neuroses* comprises four orders, *Comata*, *Adynamia*, *Spasmi*, *Vesaniæ*.

Comata. Diminished voluntary motion, with sopor, or a suspension of sense. Here an obvious and large objection immediately rises up against classifying attempts.

Let a few branches of blood-vessels be ruptured, and a little blood be poured out upon the brain, by which primarily and properly a mere hæmorrhagic disorder is constituted, and you have instantaneously all the symptoms presented to you of the first and most important order of nervous ailment. Again, the two genera of this order are apoplexy and palsy, the latter of which, often occurs without coma, and is then in truth a mere adynamic affection, so that the class neuroses, in its leading definition, and in both the genera of its very first order, is far from correctness, either in admission or omission.

Coma is usually produced by pressure upon some part of the encephalic mass; and this pressure for the most part occurs from fulness of vessel, or from extravasation; but that this is not always the case, may be analogically inferred from the phenomena of a drowsiness that is below the grade of actual disease. Let an individual, for instance, feel himself almost irresistibly impelled to sleep, under the ordinary excitants by which he is surrounded; but add a larger quantity, or subject him to a different kind of excitement, and his soporose tendency immediately changes into wakefulness and vigour. Now in this case we cannot suppose that pressure upon the brain was the cause of the first, or the removal of that pressure the occasion of the second state; the altered circumstances and feelings must surely have reference rather to some unknown change in the sentient energy than to mechanical condition, if we may so express it, of brain and nerve; and an inference has been deduced from these occurrences against the theory altogether, which ascribes the sopor of apoplexy to either fulness or pressure. Even in those instances of sentient abolition that are unquestionably connected with *hæmorrhagia cerebri*, some of your straining theorists will pertinaciously contend that the

hæmorrhage is rather a concomitant than a cause of the suspended functions; and that it is in the derangement of nervous energy that you are alone to look for a satisfactory exposition of comatose circumstance.

I believe, however, the moderate and unsystematic or independent observer will only permit the fact referred to, of volition and sense being interfered with, where no pressure can be suspected, to influence his mind against the vulgar theory of apoplexy to a certain extent. He will be led by reflection on it to qualify, but not to reject the principle. He will in some sort accord with this theorist who talks of broken down nervous power, and with that who refers the whole business rather to altered circulation, than to actual pressure; but he will also recollect that the Parisian Beggar could at any time bring an apoplexy upon himself, by merely pressing upon a denuded portion of the brain; and he will duly recognise the fact, that a man who was but a few short moments since in health and spirits, may be now lying before him snorting under the succumbence of *hæmorrhagia cerebri*.

The fault in this, as in other parts of pathology, consists in assuming that there must be one spring and source of ailment to the exclusion of all other; and the error here has not been limited merely to theoretical speculation. I fear that, on the one hand, the lancet has been systematically withheld at the large expence of life; and that, on the other, large depletions have acted in aid of disordered forces to determine the patient's untimely fate. Happy should I feel myself in the conscious possession of that decision some lay claim to, which immediately leads to both positive and negative rectitude, in these dreadful grapplings with disease and death. But we are not now to dwell upon points of practice.

Of the *adynamia*, the second order in the class neu-

roses, the existence seems sufficiently established. It is easy to conceive of defective power in the involuntary functions from defective nervous supply, without resorting to the condition of blood-vessels for an explanation of the circumstance. That these functions may thus be interfered with by some unknown condition of that part of the nervous organisation under the influence of which they are exercised, all experiments and observations bearing upon the point tend to prove; and none more so than the recent ones of Dr. Wilson Philip, who, not only by dividing the nerve which serves the digestive organs, puts a stop to the process of digestion, but who also causes digestion to be continued or resumed, by so placing the animal experimented on under the influence of voltaic electricity, that this latter is made a substitute for the nervous energy.

Adynamic disorders have been often supposed when inflammatory conditions had really been present; and to say of disease it is from defective power, without minutely investigating all its phenomena and bearings, is to let loose upon our minds a speculative principle, which may be highly injurious to our patients when carried into practical application; but at the present day, the tendency of theory and practice is rather to the opposite extreme; and in our rage for tracing every thing up to tangible sources, it may be questioned, whether the ideas of congestion and chronic inflammation have not too much superseded the due recognition of nervous agency.

Spasmodic affections, which are made to constitute the third order in the present class, are quite as difficult of explication, as are the adynamic ailments. We have assumed the deprivation of power, causing the latter to be an *unknown* condition of nerve; and of the spasmi, we may predicate the same thing, for if we admit of irregular

flows of nervous fluid, as the source of those irregular actions in the fibrous part of the frame to which the term spasm is applied, we set out without any other guide than that of a *petitio principii*, and wander, we know not whither.

Even the axiom which has been admitted by some, to an unlimited extent, in reference to the production of these disordered acts cannot, without much qualification, be received as truth; I mean the announcement that spasm originates in debility — “*Debilitas gignit spasmus;*” for when an individual is thrown down in violent convulsions from the mere circumstance of a few thread-worms being lodged in the rectum, and becomes immediately himself again, upon the expulsion of these “minute instruments of mighty mischief,” you can scarcely say in strict propriety, that it was weakness which caused, and that it is returning strength which has subdued the disorder; though as far as the convulsion itself is concerned, there may be some propriety in placing it to the account of debility, since convulsion consists in fibrous contraction not being brought up to the due pitch of orderly display.

Among the spasmi, Dr. Cullen has introduced some of his genera in most preposterous violation of his own principles; asthma, dyspnœa, and pertussis might still, perhaps, retain their present locality without minute investigation of right or claim; but he must indeed be a bold and determined disciple of the Spasmodic School, who should maintain that pyrosis and diabetes are legitimately included in this class and order of morbid affections.

The vesaniæ are well known to be those derangements which are commonly considered as distinctively mental. It has been asserted, however, that, “every nervous dis-

ease is a degree of insanity;" and there is some truth in the notion which this sweeping assertion is meant to convey. When feeling is more than commensurate to obvious circumstance, the individual thus feeling, or, in other words, thus perceiving, is considered to be under a degree of delusion corresponding with the intensity of affection; thus, when I find myself incapable of effecting a purpose, and am convinced that the feeling is correct, while, in reality, it is not, inasmuch as my want of power is merely want of consciousness that I possess the power, I am, as far as this belief and act are concerned, an insane man; as was Dr. Watts when he conceived or believed himself too bulky to pass through a doorway. But in this consists the difficulty of definitively determining respecting the degree of departure from the sane state, that a standard of sanity is assumed, the assumption being in some sort erroneous; for what is motive to me is not to another, and while I call the miser mad for loving money merely for money's sake, I, in a measure, forget that his feelings with regard to the value of money and mine are absolutely different; and so with respect to what are called and considered imaginary ailments. Who shall say that the despairing hypochondriac, contemplating and effecting the horrid purpose of suicide, feels or acts in less consistency with his state of sentient being, than does the happy individual who gratefully participates in the blessings of providence, and does all in his power to preserve his life, both from a sense of duty and a feeling of delight?

I have above made use of the term delusion, and it is upon this, after all, that we must make the essentials of madness to rest, otherwise we open the door of insanity so wide as to allow criminals to rush in at the same entry. A man goes from the gaming-table ruined, as to possession

or prospects, and prompted by vexation, shame, and despair thrusts a dagger into his breast, and lies a corpse on the ground. Another, madly, as we say, with metaphorical laxity, yields to an overwhelming passion, and deprives his neighbour of life. Now the perpetrators of these deeds were not madmen, inasmuch as there was no misconception mixed with the motives that urged them to the act: their volitions were free from the impulse of delusion, and, therefore, their acts were acts of crime, and not of insanity. But it is not so with the nervous or hypochondriac. He lives in a world of "terrible shadows." His perceptions, though abstractedly erroneous, are relatively true; and when *his* impulses mount up to the height of horrid daring and dreadful deed, you pity and deplore, rather than condemn and execrate.

A sort of impetuous insanity may, and must be admitted, in which the individual thinks and acts under an ungovernable impulse, although he is aware at the time that his thoughts and deeds are inconsistent, irrational, and immoral. How far, then, does this qualification of delusive madness admit of legitimate reception? In other words, where shall we draw the line of distinction between a vicious compliance with the commands of passion and this state of positive irresistibility. It would appear to me that we still have delusion in this latter instance; for you will find the maniac always believing, while the impulse is upon him, that he is acting under the influence of superior power, and that what he does is of necessity, not of choice. But nothing of this kind can be brought forward in favour of mere gusts of passion, or many cases of self-destruction, which last are often perpetrated with a deliberate calculation and dreadful venture as to after-reckonings. I repeat, therefore, that, unless we institute some distinction of this nature (and the distinction seems

founded altogether upon the idea of delusion), we confound disease with crime, and lose ourselves in the labyrinth of impulsive necessity. That some individuals are urged on by propensities and inclinations of a much less governable nature than others, it were absurd to question; and that these propensities are interwoven with the fibres of their material frame, must likewise be allowed; but while mental health lasts, conscience and volition say nay to impulsive daring beyond a given point, and furnish as well the motive as the power of restraint.

In respect to the altered condition of brain and nerve, upon which insanity depends, we know nothing more than we do respecting the cause of convulsive agitation, or adynamic torpor. We are fully conscious that there must be some bodily change, and that of a serious nature; for the idea of merely mental disorder is really absurd; but of the essence of this change we are often from first to last profoundly ignorant, and the suddenness with which both its visits and departures are sometimes made, is inconsistent with our notions and knowledge on organic disorder. When, indeed, we meet with opportunities of *post obit* examination, there is scarcely any morbid condition of the encephalic mass, not found in the brain of a maniac; but there is the greatest want of uniformity in these appearances: they are, most of them, met with occasionally after death from other encephalic diseases as well as insanity, and you further have it not in your power to say how much of the alteration is cause, and how much consequence. When the vascular theorists refer all the aberrations of nerve and mind to congestive and inflammatory states, they make the same mistake here as they do in reference to pyrexial pathology, by putting the acted upon in place of the agent, and by assuming the existence of states that are incidental, as if they

were necessary and invariable : so, again, do your chylopoietic speculatists, who will have that the stomach must be mad before the man, in the same sweeping way that they will not admit of an accidental blotch on the body's surface, without considering it an index of digestive derangement.

The distinction between hypochondriasis and melancholia, it must be conceded, has been too nicely drawn out, upon the ground that the one is an adynamic, and the other a vesanic ailment: but that absolute madness of the melancholic cast often takes firm hold of an unhappy individual, without at all interfering with digestive integrity, must be allowed as fact by every individual who may not have committed himself beyond recall to the catholicism of the chylopoietic creed.

Cullen, on the other hand, is certainly in error, when he states melancholia to be partial insanity, without dyspepsia, and mania to be universal madness; for the one is often as complete and universal as the other, and the difference, like that in febrile manifestation, is rather to be taken from the person affected than from the thing affecting. "Such a system of subdivision is contrary to what manifest propriety suggests. It is making the plant from an acorn dropped upon a rocky soil, not an oak, because it does not rise to the height, or spread to the extent usual to the king of the forest."

The remarks of Haslam, on this head, are well worth the attention of the nosological subdivider, "as the terms mania and melancholia are in general use (says this writer) and serve to distinguish the forms under which insanity is exhibited, there can be no objection to retain them. But I would strongly oppose their being considered as opposite diseases. In both, the association of ideas is equally incorrect, and they appear to differ only

from the different passions which accompany them. On dissection, the state of the brain does not shew any appearances peculiar to melancholy; nor is the treatment, which I have observed most successful, different from that which is employed in mania. "We every day see the most furious maniacs suddenly sink into a profound melancholy; and the most depressed and miserable objects become violent and raving."

But my lessening space warns me that it is time to quit this most interesting field for pathological culture; and pass on to the third class in Cullen's arrangement.

ASSIMILATING FUNCTION.

THE great distinction between organic and inorganic or inert matter consists in this, that the former possesses the power of converting exterior matter into a part of itself, which is not the case with the latter. Matter destitute of the living principle continues to preserve its form and substance, without receiving any thing from what is around it, and without necessarily undergoing any internal change; and when change is wrought in it by chemical agency, it then becomes a new existence; but organised bodies are constantly and inevitably receiving supply from without; are as constantly converting such supply into a part of themselves; are, therefore, momentarily undergoing mutation, and yet, throughout, preserve their form and identity.

The medium through which these changes are operated is the blood; but it is by the system of absorbing vessels that this blood is preserved in a condition, both as to quantity and quality, to effect these vital agencies.

The food which is taken into the stomach is first converted into chyme; then it is further manufactured into chyle; this chyle is poured into the thoracic duct; the thoracic duct gives it over to the blood; and thus is performed, at any rate, the main part of digestion, chymification, chyliification, assimilation, and, eventually, sanguification.

But the aliment or ingesta is not the only matter which the circulating blood receives. Something is continually thrown out by terminal arteries, or by other modes, part of which, at least, is again received into the circulating mass.

The individual who knows any thing of historical anatomy, if I may so express myself, knows that the process of return into the blood of matter thrown out from it, and of taking up new matter, with which to supply the blood with fresh fuel, has been of late years ascribed to a distinct system of vessels, named the lymphatics; in fact to these, and to the chyliiferous absorbents or lacteals have been, for the most part, attributed the whole of organic support and supply.

More recently, however, there have been many objections started against the doctrine of lymphatic absorption as held by the majority of physiologists in this country; and I must confess it does appear to me that the experiments and reasonings on this head of Magendie, Fodéra, and others, in some measure, warrant the conclusions they have come to, respecting the existence of other absorbents than those vessels which we have been accustomed to consider as exclusively endowed with this faculty.

In the remarks which I made on the circulating system, I stated the difficulty attendant upon the rationale of venous circulation, or rather of the commencing point of this part of the circulation, without supposing a sort of

imbibing or absorbing agency in some portion of the sanguiferous system. Darwin has long since expressed himself, in reference to this point, in the following terms, "As the imbibing mouths of the absorbent system (which he had just described) open on the surface and into the large cavities of the body, so there is another system of absorbing vessels, which are not commonly esteemed such, I mean the veins which take up the blood from the various glands and capillaries after their propelled fluids or secretions have been separated from it." A direct communication had been also inferred from injection, between the sanguiferous and lymphatic system of vessels; and the physiologist whose opinion I have just cited, proceeds to say, "The veins resemble the other absorbent vessels, as the progression of their contents is carried on in the same manner in both—they alike absorb their appropriate fluid, and have valves to prevent regurgitation. This appears, first, because there is no pulsation in the very beginning of the veins, which must happen if the blood was carried into them by the action of the arteries. Secondly, the venous absorption of blood from the penis and from the placenta of female animals, is still more similar to lymphatic absorption, as it is principally poured into cells where all arterial impulse must close."

I have often wondered that physiologists do not give more attention than they do to the particulars connected with this extravasated part of circulation, if it may be so called; nay, it should seem there is a sort of extravasation going on by deposits of a portion of the blood, even in parts that are not thus obviously cellular; and I repeat, that the mode of interchange between artery and vein demands still more minute investigation than it has hitherto received, from the industrious and ingenious enquirer into nature's laws.

The suggestions just alluded to go principally towards the proof of a power to absorb in the open mouths of veins. Modern physiologists carry their assumptions still further, and maintain that there is a sort of inlet through the coats of the vessels themselves; which they have endeavoured to shew is the case by laying bare portions of vein, and making them come in contact with fluids from without, by which impregnations have been communicated immediately to the contents of the vessel. Alard has indeed very plausibly suggested, that while there are subordinate sets of terminating capillaries, each devoted to its respective function, so there are similar sets of returning vessels, connected with the venous system, some of these directly terminating in the parietes of the adjacent veins, others uniting and forming independent trunks or absorbents; and upon the whole it is concluded that our usually admitted theory of lymphatic absorption is open to insuperable objections, both of a negative and positive nature. In the first place, it is urged that the suddenness with which the secretions are sometimes effected is inconsistent with the notion of the course of absorbed fluids through the lymphatics and the thoracic duct; it is further stated that, as the urine often proves tinged in a very short time with turpentine, rhubarb, copaiba, and other substances while no such tinge is traceable in the lymph contained in the thoracic duct, it would seem that this channel is not their course to the kidneys; it is moreover urged that when the thoracic duct of a dog is tied, a decoction of nux vomica injected into the stomach or rectum, kills as quickly as if the duct were pervious.

These and other experiments which the German and French and American physiologists are at this moment engaged in, have led the objectors to lymphatic absorption so far, that some of them affirm there is no

proof of the lymphatics possessing any other faculty than that of returning the lymph again to the heart; they assert that the only general absorbents are the veins, (some indeed include the arteries,) while the lacteals are destined to convey into the system, the nutritious portion of the ingesta received by the stomach.

The majority, however, of British physiologists still continue their credence in the Hunterian doctrine of lymphatic absorption, which they maintain is not at all disproved by the objections that have been started, some of which are as old as Hippocrates himself. To the fact of impregnation being communicated through a vessel laid bare, they urge that such vessel is, in some degree, by the experiment deprived of vitality, and percolation is admitted both from and into dead vessels. It is likewise said that the experimenters too much overlook in their inferences the existence and agency of the *vasa vasorum* or vessel within vessel. To the argument drawn from the suddenness with which the urinary and other secretions are tinged, while the contents of the thoracic duct are without the impregnation, it may be replied, that so is the blood; indeed, the apparent presence or absence of principles in any part of the circulation proves nothing either way, when we recollect the circumstance formerly reverted to, of the blood being destitute of any detectible poison while the system is under the influence of the most virulent of the morbid secretions. In the case of poison affecting while the thoracic duct is tied, it is stated that such is the immediate effect of these powerful agents upon the nerves, that it is not necessary to suppose absorption at all for the production of their specific effects. It has been also maintained that the experimenters who talk of detaching all portions of the lymphatic organisation from parts and organs may not in reality have done so; and

how can they consider the lymphatic vessels as being merely the channels of re-conveying the watery parts of the blood to the heart, when we are able, in many instances, to trace clearly the course of poisons received from without, the syphilitic for example, through the lymphatics into their glands, and thence observe its effects on the constitution.

All, perhaps, that an impartial observer, weighing the evidence on both sides, will be inclined to say positively, is this, that much remains both to be done and undone before the doctrine of absorption can be pronounced free from embarrassing difficulties, from whatever point of view we contemplate it.

Is matter received from without, while the external skin remains unabraded? In other words, are we authorised in believing cutaneous absorption? To discuss properly this question would require much more space than I have to spare; I am inclined, however, to believe that the arguments adduced against the principle of cutaneous absorption, however plausible and forcible, do not fully substantiate the negation. But it should seem at any rate, that the cuticle, while it retains its integrity, constitutes a very considerable barrier against the entrance of extraneous matter. Lay the poison of a rabid animal on the surface of the body, or do the same with the small-pox virus, and you fail to inoculate the subject, while the most minute portion, probably of either material, certainly of the latter, will excite a commotion in the frame capable of transmission to an almost unlimited extent—so that it is rather more than probable that the notion and apprehension of receiving fevers by contact is unfounded. When they do affect, it is, I believe, through the medium of the pulmonary organs.

Lymph and Chyle. —“The liquid which lubricates the

different cavities of the body, which is contained in the lymphatics, and which occasionally forms the chief contents of the thoracic duct, is colourless, transparent, mixable in all proportions with water, does not affect vegetable hues, is not coagulated by acids or by alcohol, but only rendered slightly turbid by the latter. It has the characters of a very weak solution of albumen." "Chyle, like blood, possesses the property of spontaneous coagulation, it is deficient only in colouring matter, and the albumen it contains differs a little from that existing in the blood itself." No distinctive difference is traceable in the chyle of graminivorous and carnivorous animals, a fact which is consistent with what I have before remarked as to the manufacturing power, if it may be so expressed, of vital agency, since nitrogen, which "constitutes an abundant ultimate principle of the chyle of herbivorous animals, exists in very small proportions only in their ordinary food."

The other fluids we may just state that seem subservient to the chyle's, and, therefore, ultimately to the blood's formation, are the saliva, the gastric juice, the bile, and the pancreatic secretion; although neither the positive nor relative share which the above fluids take in perfecting the chyle is by any means demonstrated by our present degree of physiological knowledge.

"It has reasonably been supposed that one chief use of the bile is to stimulate the lacteal vessels, and maintain the peristaltic action of the alvino canal. Yet in jaundice the lacteals perform their office, and in lictery the peristaltic action is peculiarly brisk, though the intestines are without this fluid. Hence Dr. Fordyce regarded the bile as of no service whatever in promoting the digestive process; and Sir Everard Home has given an example of a child that fed heartily, seemed to digest its food well, and

had regular stools, and was, nevertheless, without a gall-bladder, or even a duct of any kind, leading from the liver to the duodenum. And, however stimulant the bile may be to the coats and emunctories of the intestines, it has a sedative rather than a stimulative power upon the blood; and, instead of rousing to additional energy, produces weariness and inactivity."

"There are, also, a few other circumstances relating to the bile, that stand in need of explanation. The hepatic bile, or that secreted into the hepatic duct, is mild and sweet; the bile found in the gall-bladder is pungent and bitter; whence we might infer, that it is the gall-bladder which secretes the bitter principle. Yet, in children, the gall-bladder bile is as sweet as that of the hepatic duct; and, in various insects, a bile, powerfully bitter, is secreted without either gall-bladder or liver. Who shall develop the cause of these discrepancies? Who shall unfold to us the use of the bitter principle of the bile; or explain why it is necessary to the animal economy in an adult state, and not necessary in a state of infancy?"

Mr. Brodie has recently, however, made some experiments on this subject, and he found that when the chole-dic duct was tied, so as to completely prevent the bile from flowing into the intestines "not the smallest trace of chyle was perceptible either in the intestines or lacteals."

That the salivary secretion is subservient to digestion, and, therefore, to the manufactory and assimilation of chyle, seems sufficiently certain; and the secretion which flows from the pancreas, and is received by the duodenum, appears to have a considerable connection in office with the salivary fluid: but still the altogether of digestive mutation, of chymification, of chyle production, and separation of the effete from the nutritious portion of

the alimentary mass, are not quite open to satisfactory detail.

Now, the idea upon which is established the third class, in Cullen's arrangement of morbid affection, is this; that a depraved condition may be present of those organs which are destined by nature for assimilation or elimination, without either the nervous system or the blood-vessels being primarily implicated; such disorders, under the prevalence of the humoral pathology, were ascribed to bad humours pervading the body,—a notion which Dr. Cullen has himself, in some measure, given into, by retaining the term *cachexy*; but to disordered *action* in the absorbent or secerning organisation, are the occurrences in the present day rather referred; and the predisposition to them is thought to consist in a particular susceptibility to be acted on in this portion of the frame.

Dr. Cullen's orders of this class, are *Marcores*, or emaciation; *Intumescentiæ*, or swellings, and *Impetigines*, or those *cachexiæ* which principally manifest themselves in the skin and superficies of the body.

Of emaciation he makes two kinds, the tabid and atrophic; the one being attended with hectic fever, as a prime and peculiar accompaniment, the other being without this index of diseased state. In strict accordance, however, with his own principles, Dr. Cullen ought, perhaps, to have transferred atrophy to the class *neuroses*, since the assimilating functions in this case would only seem to be secondarily at fault, or to be merely consequent upon something wrong in other parts of the body; while the tabid disorders are more marked by some inherent and essential error in the assimilating or secernent organs,—and in these, some indications, at least of hectic disposition, may, for the most part, be traced. Without wishing to generalise beyond the warranty of fact, I should say that

in these last, also, the scrophulous diathesis is, in a greater or minor degree, conspicuous. What is hectic? What is scrophula? To these questions it may not perhaps be very easy to reply, without the use of a terminology that the eclectic demands of the present day would consider too much encumbered with hypothetical trappings to be received as legitimate; but thus much seems certain, that some individuals are so constructed principally in reference to lymphatic organisation and susceptibility, that any cause which produces derangement, or deviation from healthy action, fastens with more facility upon this part of the frame, (the lymphatic) than upon any other; and these are they who by common consent, are considered scrophulous — these are they, moreover, in whom hectic fever is soonest established; so much so, that an attentive observer may be guided in his recognition of scrophulous tendency, by the readiness which hectic manifests to start up and accompany a disorder's progress.

Fully marked hectic is, indeed, for the most part, a signal that local disorganisation of a serious nature, has established itself in some part of the body; and it is so general an attendant upon the suppurative process, as to have led some theorists to trace its essence into re-absorption of pus which had been poured out from the blood-vessels; but it does certainly shew itself at times without any topical accompaniment, and does appear, in some way or other, to be especially connected with the lymphatic and seccernent systems. If two children be affected simultaneously with inflammation of the brain, from the same exciting cause, and one of them has more of the scrophulous diathesis about him than the other, you will in this one find a readier disposition to hydrocephalic effusion, you will find his little cheeks sooner painted by

the hectic blush, and all things more rapidly tending towards a certain *sort* as well as grade of disease.

Fill the stomachs of two other children with food, which, both in kind and quality, shall make too large a demand upon the digestive and assimilating powers; in the one case you will have common pyrexial disturbance produced, or the infantile remittent fever of authors will be engendered; in the other, you will have a knotted protuberant abdomen, a hectic circle of red on the face, emaciated limbs, and, in fact, *tabes mesenterica*; and why? Because in this last case, the mesenteric glands, as parts of the lymphatic or lacteal system, are constitutionally obnoxious to ready derangement; and, probably, because there is not the proper absorbent process going on in the several *secerne*nts that are connected with the assimilating process: there may not merely be a deficient quantity of the biliary and pancreatic secretions, but such diminution may be accompanied by a deficient stimulant property in these secretions; since from the inactivity of the absorbents, their watery parts are not readily re-absorbed, and thus the duodenum receives them in too dilute a state for functional demands. The emaciation, then, of this child, and its weakness are not induced in the same way, as the weakness and want of flesh in the other. In the subjects of remittent fever, the vascular and nervous systems appear to have been more engaged with the disease, and the altogether of the morbid process has been of a different nature.

It will be evident, then, if the above principles are allowed to be correct, that there does exist something like a stable foundation for that distinction between *tabes* and *atrophy* which the student will find in Cullen's *order marcores*; but still, I repeat, that this latter, not being primarily and essentially an affection of the lymphatic system, ought not to have had a place among the *cachexiæ*.

Of the intumescentiæ, the next order of the class, the rationale is often exceedingly obscure. When a permanent enlargement takes place of the abdomen, and we find such enlargement to be constituted by a deposit of fluid in the peritonæal cavity, we may seem to have some precise knowledge of the *modus generandi*, at any rate we are convinced that the tumefaction is occasioned by exhalation being in greater than due quantity, or absorption less: but a tense protuberant abdomen shall often present itself, which can no otherwise be accounted for than by a secretion of air, and which protuberance shall appear and disappear in a manner as difficult to trace as is any morbid process to which the body is obnoxious. That the emphysematous and tympanitic and adipose, and physconic enlargements are, however, in some sort or other, dependant upon a depraved, or rather deranged, action in the secretory and absorbent functions, may be considered as pretty certain; and hence the propriety of their admission into this class of diseases.

In respect of actual dropsy, I have just intimated that the pathology is rather more satisfactory; even here, however, opinion varies as to the precise principle upon which the interstitial deposit is effected. Systematics have been accustomed, until very lately, to settle the account, by assuming a want of due adjustment in the proportion of exhalation and absorption; and in this way connecting necessarily the idea of debility, with the development of the disordered state. More recently, however, an undue accumulation of fluid, either in the cellular membrane, or any of the cavities of the body, has been looked upon, rather as the result of morbidly increased action — of inflammation, in fact, than of torpor, or want of excitement. In some diseases, that go under the denomination of dropsy, this assumed action has been

most manifestly present, as in acute hydrocephalus, in hydrothorax succeeding to pneumonia, and in ascites to peritonæal inflammation ; but it may, I think, be questioned whether we have not too precipitately changed sides with regard to hydropic pathology, and now think of action too much, as before we thought too much of torpor.

Dropsy appears fairly traceable to at least three sources. When you have sluggish circulation connected with, and indeed caused by, venous plethora, the overladen vessels empty themselves by means of their contiguous exhalents in a sort of percolating way, or, at least, without the induction of any disordered process, that can be justly considered analogous to inflammation. It is this kind of dropsy, that gradually supervenes upon obstructed viscera; such obstruction causing an impediment to a free flow of blood, and a consequent remora, among contiguous vessels. In this case, neither are the exhalents nor absorbents properly at fault, nor as I have just said, is there any inflammatory irritation, causing the exudation.

Serous or watery accumulations at other times take place where every thing about the patient indicates torpor, and torpor of a particular kind, where, as it has been happily expressed, the “ last guardians of the safety of the animal economy give way, and refuse to do the work of absorption.” In this case, we have clearly dropsy from debility.

Lastly, some kinds of inflammation more open, or more masked, (for it has too often existed, when it had not been suspected,) so implicates the terminal arteries that they are obliged in their own defence, as it were, to throw out an extraordinary quantity of serous effusion, and occasionally something more than the mere watery portions of the vital fluid are sent through them during the hurry and commotion of the process. Even here, however, the

tendency to lymphatic exudation is partly constitutional, and you will find, from the first, more disposition to hectic production than is common to ordinary inflammation.

Whether a fourth cause of dropsy may be put down, viz. "actual tenuity of blood brought on by hæmorrhage," as expressed by Dr. Cullen, seems, to say the least, problematical. The blood certainly may be, and often is, deficient in its due proportion of solid to serous part; but whether this condition *in se* would add to serous effusion is something more, I think, than doubtful.

Rickety deformity, one of the genera of the present order, it does not seem difficult to account for in detail. During infancy, one of the main duties of exhaling or secreting vessels is to throw down calcareous matter into the cartilages and osseous membranes, so as to form bone. But when the blood, from which this osseous matter is manufactured, is not duly fed with repeated supplies of well-formed chyle, the consequence is a failure in quantity and kind of deposition; or, it may be, that, from some vice in the re-absorbing energy, the same effect is more indirectly brought about; and in this last case, we may have undue or irregular ossification, even when the blood abstractedly may not be in fault.

The third order of the class impetigines, need not detain us long. Scrophula is its first genus; and on this species of morbid affection, or of disordered predisposition (for it is sometimes one, and sometimes the other) I have already briefly observed. To say that it consists of a peculiar condition of the lymphatic system, is not to say much in the way of absolute exposition of essence, but I am afraid we cannot safely proceed much further in substantiating its rationale. To the immediate circumstances, however, connected with lymphatic and glandular derangement, scrophula by no means appears to limit its

workings. Madness itself is often of a scrophulous nature ; and in this case, of course, the nervous organisation is unequivocally implicated in the disorder ; but still, even here, there is a something by which you seem convinced of the more than common connexion between the production of the malady, and the derangement of those organs to which scrophula, more especially, appertains ; you will, even here, unless my preconceptions give an erroneous colouring to my observations, trace a tendency to hectic irritation ; and the altogether of the case will tell you that the evil is of a peculiar, not of a common nature. It ought, however, to be recollected that the scrophulous diathesis is denoted by considerable variety in respect of degree. There are scarcely any individuals in Britain, without some slight tokens of its making up part of their constitutional stamina, while it is in some so conspicuously marked as to be obvious to the most superficial observer.

Of syphilis, the second genus of the order impetigines, it would here be altogether out of place, to say any thing ; and scorbutus, the third genus, is principally a disease of seamen : this last would seem opposed to scrophula, in the circumstance, not only of its directly acknowledging an exciting cause of an unequivocal operation ; but in its being an affection, rather of the sanguiferous, than of the assimilating organs. The whole system, indeed, in real scurvy becomes implicated with the morbid processes ; and to advocate the doctrine of its being dependent upon a depraved condition of the blood, would be to prove ourselves partial to theory, at the expence of observation ; it must, however, be confessed, that a clear line of difference is traceable, between scorbutus and scrophula, by the one being more sanguineous, the other more glandular.

Of the four succeeding genera of the present order ;

elephantiasis, lepra, frambæsia, and trichoma, I shall have to treat, when considering the subject of cutaneous diseases; and with respect to icterus (jaundice) it is only necessary here to state that its situation among the cachexiæ is manifestly wrong. That an accidental obstruction of the bile passages causing the fluid destined for one part of the system to be thrown upon another, should be put down to the score of bad habit, would seem in every point of view to be highly inconsistent with the principles of the classification; but it becomes more obviously and especially so, when the term cachexy is meant to predicate a morbid tendency, or a disordered action in the secernent, assimilating, or glandular organs.

We have thus run rapidly over, in a prefatory way, the three first classes of Cullen's nosology, comprising sanguiferous, nervous, and lymphatic ailments. On the fourth class, we shall not here engage ourselves beyond a mere comment on the difficulty which all nosologists must necessarily meet with, in endeavouring to separate in essence topical from general malady. Excepting, indeed, when disordered manifestation is the immediate result of an exterior excitant, directly and exclusively applied to a part, it may be questioned, whether the idea of locality as applied to disease may not be altogether erected upon a wrong foundation; there is such an intimate and pervading connexion among the several constituents of an organised body, that the isolation, thus assumed, not only seems insusceptible of proof, but the practice built upon the assumption is likely to lead to inefficient and dangerous results. In the first order, for instance, of Cullen, namely, the dysæsthesiæ, comprising affections of the senses from vitiated organs, as caligo, amaurosis, dysopia, &c. we often positively know, and perhaps we may always positively infer, that the local is but an accidental

expression of systematic or general evil. Then, again, among the dysorexiæ, or depraved appetite, with what propriety can anorexia and bulimia, be regarded as partial derangements, while dyspepsia is considered a general affection, even although this last, by the admission of our nosologist himself, is sometimes consequent upon a disease *ipsius ventriculi*. Between nymphomania and nostalgia, which are placed by Dr. Cullen in immediate succession, we can trace no further connection than in their commencing letter; and, upon this principle, nosology and nonsense are nearly allied: to call “a vehement desire of revisiting our native home,” a *local* affection, would seem indeed totally inconsistent with any other notion, than that of an obscure anticipation of organological doctrine.

But further strictures on these points, I reserve for the second part, to which I now proceed; first presenting Dr. Cullen’s nosology as a text-book, and then making that use of it in translation and comment which shall suit the avowed purpose of the present Compendium.

PART II.

DISEASES INDIVIDUALLY CONSIDERED.

Synopsis Nosologicæ Methodicæ, exhibens Systema Nosologicum. — Auctore Gulielmo Cullen, M. D.

SERIES CLASSIUM ET ORDINUM.

CLASSIS I. PYREXIÆ.

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|--------------------------|------------------------------|
| ORD. I. <i>Febres.</i> | ORD. IV. <i>Hæmorrhagiæ.</i> |
| II. <i>Phlegmasiæ.</i> | V. <i>Profluvia.</i> |
| III. <i>Eranthemata.</i> | |

CL. II. NEUROSES.

- | | |
|----------------------|---------------------|
| I. <i>Comata.</i> | III. <i>Spasmi.</i> |
| II. <i>Adynamiæ.</i> | IV. <i>Vesaniæ.</i> |

CL. III. CACHEXIÆ.

- | | |
|---------------------------|--------------------------|
| I. <i>Marcores.</i> | III. <i>Impetigines.</i> |
| II. <i>Intumescentiæ.</i> | |

CL. IV. LOCALES.

- | | |
|-------------------------|------------------------|
| I. <i>Dysæsthesiæ.</i> | V. <i>Epischeses.</i> |
| II. <i>Dysorexiæ,</i> | VI. <i>Tumores.</i> |
| III. <i>Dyscinesiæ.</i> | VII. <i>Ectopiæ.</i> |
| IV. <i>Apocenoses.</i> | VIII. <i>Dialyses.</i> |

TABULA CLASSIUM, ORDINUM, ET GENERUM.

CLASSIS I. PYREXIÆ.

Ord. I. Febres.

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|----------------------|----------------|
| § 1. Intermittentes. | § 2. Continuæ. |
| 1 Tertianæ. | 4 Synocha. |
| 2 Quartana. | 5 Typhus. |
| 3 Quotidiana. | 6 Synochus. |

Ord. II. Phlegmasiæ.

- | | | |
|---------------|-----------------|------------------|
| 7 Phlogosis. | 13 Peritonitis. | 19 Cystitis. |
| 8 Ophthalmia. | 14 Gastritis. | 20 Hysteritis. |
| 9 Phrenitis. | 15 Enteritis. | 21 Rheumatismus. |
| 10 Cynanche. | 16 Hepatitis. | 22 Odontalgia. |
| 11 Pneumonia. | 17 Splenitis. | 23 Podagra. |
| 12 Carditis. | 18 Nephritis. | 24 Arthropuosis. |

Ord. III. Exanthemata.

- | | | |
|----------------|----------------|---------------|
| 25 Variola. | 29 Pestis. | 32 Urticaria. |
| 26 Varicella. | 30 Erysipelas. | 33 Pemphigus. |
| 27 Rubeola. | 31 Miliaria. | 34 Aphtha. |
| 28 Scarlatina. | | |

Ord. IV. Hæmorrhagiæ.

- | | |
|----------------|-----------------|
| 35 Epistaxis. | 37 Hæmorrhoids. |
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CL. I. PYREXIÆ.

Character. — Post horrorem pulsus frequens, calor major, plures functiones læsæ, viribus præsertim artuum imminutis.

ORD. I. FEBRES.

Prægressis languore, lassitudine, et aliis debilitatis signis, pyrexia, sine morbo locali primario.

SECT. I. INTERMITTENTES.

Febres, miasmate paludum ortæ, paroxysmis pluribus apyrexia, saltem remissione evidente interpositâ, cum exacerbatione notabili, et plerumque cum horrore redeuntibus, constantes : Paroxysmo quovis die unico tantum.

GENUS I. TERTIANA.

Paroxysmi similes intervallo quadraginta octo circiter horarum ; Accessionibus meridianis.

Tertiana est vel

1. *Interposita Apyrexia*, quæ

1. Variat paroxysmi duratione.

A. *Tertiana* paroxysmis haud ultra horas duodecim extensis.

B. *Tertiana* paroxysmis ultra horas duodecim extensis.

2. Variat paroxysmorum recursum.

C. *Tertiana* quotidie revertens, paroxysmis inæqualibus, alternis similibus.

D. *Tertiana* alternis diebus revertens, paroxysmis eodem die binis.

E. *Tertiana* quotidie revertens, paroxysmis altero die binis, altero unico tantum.

F. Tertianæ quotidie revertens, interpositâ remissione inter diem imparē et parē magis, inter parē et imparē minus, notabili.

3. Variat symptomatibus.

G. Tertianæ effectibus soporosis stipata.

H. Tertianæ spasmis et motibus convulsivis stipata.

I. Tertianæ efflorescentiâ cutis stipata.

K. Tertianæ phlegmasiâ stipata.

4. Variat aliis morbis complicata.

5. Variat ratione principii.

II. *Interposita Remissione tantum.*

GENUS II. QUARTANA.

Paroxysmi similes intervallo septuaginta duarum circiter horarum : Accessionibus pomeridianis.

Est vel

I. *Interposita Apyrexia.*

1. Variat typo.

A. Quartana paroxysmis quarto quoque die singulis; aliis diebus nullis.

B. Quartana paroxysmis quarto quoque die binis; aliis diebus nullis.

C. Quartana paroxysmis quarto quoque die tribus; intermediis diebus nullis.

D. Quartana quæ ex quatuor diebus tertium tantum à febre vacuum habet, paroxysmis quarto quoque die similibus.

E. Quartana quotidie accedens, paroxysmis quarto quoque die similibus.

2. Variat symptomatibus.

3. Variat aliis morbis complicata.

II. *Interposita Remissione tantum*

GENUS III. QUOTIDIANA.

Paroxysmi similes intervallo viginti quatuor circiter horarum :

Paroxysmis matutinis.

I. *Interposita Apyrexia.*

1. Variat solitaria.

A. Universalis.

Quotidiana eâdem horâ matutinâ rediens.

B. Partialis.

2. Variat comitata.

II. *Interposita Remissione tantum.*

SECT. II. CONTINUÆ.

Febres, sine intermissione, nec miasmate paludum ortæ, sed cum remissionibus et exacerbationibus, parum licet notabilibus, perstantes: Paroxysmis quovis die binis.

GENUS IV. SYNOCHA.

Calor plurimum auctus; pulsus frequens, validus, et durus; urina rubra: sensorii functiones parum turbatæ.

GENUS V. TYPHUS.

Morbus contagiosus; calor parum auctus; pulsus parvus, debilis, plerumque frequens; urina parum mutata; sensorii functiones plurimum turbatæ; vires multum imminutæ.

Species sunt,

I. Typhus (*petechialis*) plerumque cum petechiis.

Variat gradu.

1. Typhus mitior.

2. Typhus gravior.

II. Typhus (*icterodes*) cum flavedine cutis.

GENUS VI. SYNOCHUS.

Morbus contagiosus. Febris ex synocha et typho composita, initio synocha, progressu et versus finem typhus.

Hectica.

Febris quotidie revertens; accessionibus meridianis et vespertinis; remissione, rarius apyrexia, matutinâ; plerumque

sudoribus nocturnis, et urinâ sedimentum furfuraceo-lateritium deponente.

ORD. II. PHLEGMASIÆ.

Febris synocha; phlogosis; vel dolor topicus, simul læsâ partis internæ functione; sanguis missus, et jam concretus, superficiem coriaceam albam ostendens.

GENUS VII. PHLOGOSIS.

Pyrexia partis externæ rubor, calor, et tensio dolens.

Species sunt

I. Phlogosis (*Phlegmone*) rubore vivido; tumore circumscripto, in fastigium plerumque elevato, sæpe in apostema abeunte: dolore sæpe pulsatili.

1. Variat formâ.

2. Variat sede.

II. Phlogosis (*Erythema*) colore rubicundo, pressione evanescente; ambitu inæquali, serpente; tumore vix evidente, in cuticulæ squamulas, in phlyctænas vel vesiculas abeunte; dolore urente.

1. Variat vehementiâ.

2. Variat causâ remotâ.

3. Variat complicata.

Phlogosis sequelæ sunt

Apostema.

Post phlogosin, remittentibus dolore et pulsatione, tumor albescens, mollis fluctuans, pruriens.

Gangræna.

Post phlogosin, pars livens, mollis, parum sensibilis, sæpe cum vesiculis ichorosis.

Sphacelus.

Post gangrænam, pars nigricans, flaccida, facile lacerabilis,

sine sensu vel calore, et cum fœtore carnis putridæ; vitio celeriter serpente.

GENUS VIII. OPHTHALMIA.

Rubor et dolor oculi; lucis intolerantia; plerumque cum lachrymatione.

Ophthalmiæ species et varietates sunt

I. *Idiopathicæ.*

1. Ophthalmia (*membranarum*) in tunica adnata, et ei subjacentibus membranis, sive tunicis oculi.

A. Variat gradu phlogosis externæ.

B. Variat affectis tunicis internis.

2. Ophthalmia (*Tarsi*) cum tumore, erosione, et exudatione glutinosa tarsi palpebrarum.

II. *Symptomaticæ.*

1. A morbo ipsius oculi.

2. A morbis aliarum partium, vel totius corporis.

GENUS IX. PHRENITIS.

Pyrexia vehemens; dolor capitis; rubor faciei et oculorum; lucis et soni intolerantia; pervigilium; delirium ferox vel typhomania.

GENUS X. CYNANCHE.

Pyrexia aliquando typhodes; rubor et dolor faucium; deglutitio et spiratio difficiles, cum angustię in faucibus sensu.

Species sunt.

I. Cynanche (*tonsillaris*) membranam faucium mucosam, et præcipue tonsillas, tumore et rubore afficiens, cum febre synocha.

II. Cynanche (*maligna*) tonsillas et membranam faucium mucosam afficiens tumore, rubore, et crustis mucosis coloris albescentis vel cineritii, serpentibus, et ulcera tegentibus; cum febre typhode et exanthematis.

III. Cynanche (*trachealis*) respiratione difficili, inspiratione strepente, voce raucâ, tussi clangosâ, tumore fere nullo in

faucibus apparente, deglutitione parum difficili, et febre synochâ.

IV. Cynanche (*pharyngea*) cum rubore in imis præsertim faucibus; deglutitione maxime difficili, dolentissima; respiratione satis commoda, et febre synocha.

V. Cynanche (*parotidea*) cum tumore externo parotidum et maxillarum glandularum magno; synocha plerumque leni.

Cynanche symptomaticæ sunt

a. A causis internis.

b. A causis externis.

GENUS XI. PNEUMONIA.

Pyrexia; dolor quâdam thoracis parte; respiratio difficilis; tussis.

Species sunt

I. Pneumonia (*peripneumonia*) pulsu non semper duro, aliquando molli; dolore thoracis obtuso; respiratione perpetuo difficili, sæpe non nisi trunco corporis erecto exercendâ; faciei tumidæ colore purpureo; tussi plerumque humidâ, sæpe cruentâ.

1. Peripneumoniæ idiopathicæ simplices.

Variat gradu.

2. Peripneumoniæ idiopathica complicatæ febre.

II. Pneumonia (*pleuritis*) pulso duro; dolore, plerumque lateris, pungente, sub inspiratione præsertim aucto; decubitu in latus molesto; tussi dolentissimâ, initio siccâ, postea humidâ, sæpe cruentâ.

1. Pleuritides idiopathicæ simplices.

2. Pleuritides complicatæ.

a. Febre.

b. Catarrho.

3. Pleuritides symptomaticæ.

4. Pleuritides falsæ.

Pneumoniæ sequelæ sunt

Vomica.

Post pneumoniam, resolutione quâdam non terminatam, dysp-

nœa et tussis perstantes, cum decubitu in latus sanum difficili, et febre hectica.

Empyema.

Post pneumoniam suppuratione terminatam, sæpe post vomitam, remissio doloris, dum perstant dyspnœa, tussis, decubitus difficilis, et febris hectica, sæpe cum sensu liquoris in pectore fluctuantis, et signis hydrothoracis.

GENUS XII. CARDITIS.

Pyrexia; dolor in regione cordis; anxietas; spiritus difficilis; tussis; pulsus inequalis; palpitatio; syncope.

I. *Idiopathica.*

II. *Symptomatica.*

GENUS XIII. PERITONITIS.

Pyrexia; dolor abdominis, corpore erecto auctus; absque propriis aliarum phlegmasiarum abdominalium signis.

Si signa darentur quibus dignosci queant, sequentes pro speciebus peritonitis recenseri possent.

I. Peritonitis (*propria*) in peritonæo strictius dicto, sive in peritonæo abdomen intus succingente.

II. Peritonitis (*omentalis*) in peritonæo, per omentum extenso.

III. Peritonitis (*mesenterica*) peritonæo, per mesenterium extenso.

GENUS XIV. GASTRITIS.

Pyrexia typhodes; anxietas; in epigastrio ardor et dolor, ingestis quibuslibet auctus; vomendi cupiditas et ingesta protinus rejecta; singultus.

I. *Idiopathicæ.*

1. A causis internis.

A. Gastritis (*phlegmonodea*) dolore acuto, pyrexia vehementi.

2. A causis externis.

B. Gastritis (*erythematica*) dolore et pyrexia lenioribus, rubore erysipelatoso in faucibus apparente.

II. *Symptomaticæ*.

GENUS XV. ENTERITIS.

Pyrexia typhodes; dolor abdominis pungens, tendens, circa umbilicum torquens; vomitus; alvus pertinaciter adstricta.

I. *Idiopathicæ*.

Species sunt

1. Enteritis (*phlegmonodea*) dolore acuto, pyrexiâ vehementi, vomitu et alvo astrictâ.
2. Enteritis (*erythematica*) dolore et pyrexiâ lenioribus, sine vomitu, et cum diarrhœa.

II. *Species Symptomaticæ*.

GENUS XVI. HEPATITIS.

Pyrexia; hypochondrii dextri tensio et dolor, sæpe pungens pleuritici instar, sæpius obtusus; dolor ad claviculam et summum humeri dextri; decubitus in sinistrum latus difficilis; dyspnœa; tussis sicca; vomitus; singultus.

Variat,

I. Acuta, signis in caractere dictis dignoscenda.

II. Chronica. Hæc sæpe nulla quibus dignoscatur signa, præbet; aliquando tamen eandem adesse suspicari potest, ex hepatitidis causis quibusdam prægressis, ex sensu quodam plenitudinis et gravitatis in hypochondrio dextro, ex doloribus plus minusve pungentibus in eadem parte subinde perceptis, ex dolore quodam à presso hypochondrio dextro vel à decubitu in latus sinistrum sentito, et denique ex pyrexiâ leviori cum dictis signis subinde infestante.

GENUS XVII. SPLENITIS.

Pyrexia; hypochondrii sinistri tensio, calor, tumor, et dolor pressu auctus; absque signis nephritidis.

GENUS XVIII. NEPHRITIS.

Pyrexia: dolor in regione renis, sæpe ureteris iter sequens; mictio frequens urinæ, vel tenuis decoloris, vel ruberrimæ; vomitus; cruris stupor; testiculi ejusdem lateris retractio aut dolor.

Species.

I. *Idiopathicæ. Spontaneæ.*

II. *Symptomaticæ.*

GENUS XIX. CYSTITIS.

Pyrexia; hypogastrii tumor et dolor; mictio frequens dolorifica, vel ischuria; tenesmus.

Species sunt

I. A causis internis.

II. A causis externis.

GENUS XX. HYSTERITIS.

Pyrexia; hypogastrii calor, tensio, tumor, et dolor; os uteri tactu dolens; vomitus.

GENUS XXI. RHEUMATISMUS.

Morbus ab externa, et plerumque evidente causâ; pyrexia; dolor circa articulos, musculorum tractum sequens, genua et reliquos majores, potius quàm pedum vel manuum articulos, infestans, calore externo auctus.

Species idiopathica.

Rheumatismus acutus.

Rheumatismus vulgaris.

Variat sede,

A. In musculis lumborum.

B. In musculis coxendicis.

C. In musculis thoracis.

Rheumatismi sequela est,

Arthrodynia.

Post rheumatismum, nisum violentum, vel subluxationem; dolores artuum vel musculorum, sub motu præsertim, aucti,

plus minusve fugaces, calore leeti, vel alio externo levati; artus debiles, rigidi, faëile et sæpe sponte frigeseentes; pyrexia nulla; tumor plerumque nullus.

Lumbago et ischias aliquando morbi æuti, sed eum sæpius chroniei sint, plerumque ad hunc locum pertinent.

GENUS XXII. ODONTALGIA.

Rheumatismus vel arthrodynia maxillarum à carie dentium.

GENUS XXIII. PODAGRA.

Morbus hæreditarius, oriens sine causâ externâ evidente, sed præeunte plerumque ventriculi affectione insolitâ; pyrexia; dolor ad artieulum, et plerumque pedis pollicis, eerte pedum et manuum juneturis, potissimum infestus; per intervalla revertens, et sæpe cum ventriculi, vel aliarum internarum partium, affectionibus alternans.

Varietates sunt

- I. Podagra (*regularis*) eum inflammatione artuum satis vehementi, per aliquot dies perstante, et paulatim eum tumore, pruritu, et desquamatione partis, reeedente.
- II. Podagra (*atonica*) eum ventriculi vel alius partis internæ atonica et vel sine exspectata aut solita artuum inflammatione, vel eum doloribus artuum lenibus tantum et fugacibus, et eum dyspepsia vel aliis atoniæ symptomatis, subito sæpe alternantibus.
- III. Podagra (*retrograda*) eum inflammatione artuum subito reeedente, et ventriculi vel alius partis internæ atonia mox insecuta.
- IV. Podagra (*aberrans*) cum partis internæ inflammatione, vel non prægressâ, vel prægressâ et subito reeedente, inflammatione artuum.

Conjungitur aliquando aliis morbis podagra.

GENUS XXIV. ARTHROPOISIS.

Dolores artuum vel partium musculosarum, sæpe post contusionem, profundi, obtusi, diuturni; tumor vel nullus, vel

modicus, et diffusus; phlogosis nulla; pyrexia primum lenis, tandem hectica, et simul partis apostema.

ORD. III. EXANTHEMATA.

Morbi contagiosi, semel tantum in decursu vitæ aliquem afficientes; cum febre incipientes; definito tempore apparent phlogoses, sæpe plures, exiguæ, per cutem sparsæ.

GENUS XXV. VARIOLA.

Synocha contagiosa cum vomitu, et ex epigastrio presso dolore.

Tertio die incipit, et quinto finitur eruptio papularum phlegmonodearum, quæ, spatio octo dierum, in suppurationem, et in crustas demum abeunt, sæpe cicatrices depressas, sive foveolas in cute, relinquentes.

Species sunt

- I. Variola (*discreta*) pustulis paucis, discretis, circumscriptione circularibus, turgidis; febre eruptione factâ protinus cessante.
- II. Variola (*confluens*) pustulis numerosis, confluentibus, circumscriptione irregularibus, flaccidis, parum elevatis; febre post eruptionem perstante.

GENUS XXVI. VARICELLA.

Synocha.

Papulæ post brevem febriculam erumpentes, in pustulas variolæ similes, sed vix in suppurationem, euntes; post paucos dies in squamulas, nullâ cicatrice relictâ, desinentes.

GENUS XXVII. RUBEOLA.

Synocha contagiosa cum sternutatione, epiphora, et tussi sicca, rauca.

Quarto die, vel paulo serius, erumpunt papulæ exiguæ, confertæ, vix eminentes, et post tres dies in squamulas furfuraceas minimas abeuntes.

- I. Rubeola (*vulgaris*) papulis minimis, confluentibus corymbosis, vix eminentibus,

1. Symptomatis gravioribus, et decursu minus regulari.
 2. Comitante Cynanche.
 3. Comitante diathesi putridâ.
- II. Rubeola (*variolodes*) papulis discretis eminentibus.
Scotis, the NIRLES.

GENUS XXVIII. SCARLATINA.

Synocha contagiosa.

Quarto morbi die, facies aliquantum tumens: simul in cute passim rubor floridus, maculis amplis, tandem coalescentibus, post tres dies in squamulas furfuraceas abiens; superveniente dein sæpe anasarcâ.

Species sunt

- I. Scarlatina (*simplex*) nullâ comitante cynanche.
- II. Scarlatina (*cynanchica*) cum cynanche ulcerosa.

GENUS XXIX. PESTIS.

Typhus maxime contagiosa, cum summa debilitate.
Incerto morbi die, eruptio bubonum vel anthracum.

GENUS XXX. ERYSIPELAS.

Synocha duorum vel trium dierum, plerumque cum somnolentia, sæpe cum delirio.

In aliqua cutis parte, sæpius in facie, phlogosis erythema,
GEN. VII. sp. 2.

Species sunt

- I. Erysipelas (*vesiculosum*) erythemate, rubedine, serpente, latum, spatium occupante, et locis ejus quibusdam in vesiculas magnas abeunte.
- II. Erysipelas (*phlyctænodes*) erythemate ex papulis pluribus trunci corporis partes præcipue occupantibus, et protinus in phlyctænas, sive vesiculas parvas, abeuntibus.

GENUS XXXI. MILIARIA.

Synochus cum anxietate, frequenti suspirio, sudore olido, et punctionibus cutis.

Incerto morbi die erumpunt papulæ, rubræ, exiguæ, discretae, per totam cutem, præter faciem, crebræ, quarum apices, post unum vel alterum diem, pustulas minimas, albas, brevi manentes, ostendunt.

GENUS XXXII. URTICARIA.

Febris amphimerina.

Die secundo rubores maculosi, urticarum puncturas referentes, interdiu fere evanescentes, vespere cum febre redeuntes, et post paucos dies in squamulas minutissimas penitus abeuntes.

GENUS XXXIII. PEMPHIGUS.

Typhus contagiosa.

Primo, secundo, aut tertio morbi die, in variis partibus vesiculæ, avellanæ magnitudine, per plures dies manentes, tandem ichorem tenuem effundentes.

GENUS XXXIV. APHTHA.

Synochus.

Lingua tumidiuscula; linguæ et faucium color purpurascens; escharæ in faucibus et ad linguæ margines primum comparentes, os internum totum demum occupantes, albidæ, aliquando discretæ, sæpe coalescentes, abrasæ cito renascentes, et incerto tempore manentes

Speciem idiopathicam unicam tantum novi.

Aphtha infantum.

ORD. IV. HÆMORRHAGIÆ.

Pyrexia cum profusione sanguinis absque vi externa; sanguis missus ut in phlegmasiis apparet.

GENUS XXXV. EPISTAXIS.

Capitis dolor vel gravitas; faciei rubor; profusio sanguinis e naribus.

I. *Idiopathicæ.*

Variat ratione ætatis.

Epistaxis (*juniorum*) cum signis plethoræ arteriosæ.

Epistaxis (*ænum*) cum signis plethoræ venosæ.

II. *Symptomaticæ*.

1. A causis internis.
2. A causis externis.

GENUS XXXVI. HÆMOPTYSIS.

Genarum rubor; molestiæ aut doloris, et aliquando caloris, in pectore sensus; dyspnœa; titillatio faucium; tussis aut tussicula sanguinem floridum, sæpe spumosum, rejiciens.

Species idiopathicæ sunt

1. Hæmoptysis (*plethorica*) nullâ vi externâ applicatâ, neque prægressa tussi aut evacuationis solitæ suppressione.
2. Hæmoptysis (*violenta*) à vi externa applicata.
3. Hæmoptysis (*phthisica*) post tussim cum macie et debilitate diuturnam.
4. Hæmoptysis (*calculosa*) rejectis simul moleculis calculosis plerumque calcareis.
5. Hæmoptysis (*vicaria*) post evacuationis solitæ suppressionem.

Symptomaticæ sunt,

Hæmoptysis pneumonica.

Hæmoptysis exanthematica.

Hæmoptysis hydropica.

Hæmoptysis cachectica.

Hæmoptyseos sequela est

PHTHISIS.

Corporis emaciatio et debilitas, cum tussi, febre hectica, et plerumque expectoratione purulenta.

Species sunt

- I. Phthisis (*incipiens*) sine expectoratione puris.
- II. Phthisis (*confirmata*) cum expectoratione puris.

Variat utraque species,

Ratione causæ remotæ.

Variat ratione fontis purulentæ.

GENUS XXXVII. HÆMORRHOIS.

Capitis gravitas vel dolor; vertigo; lumborum dolor; dolor ani; circa anum tubercula livida dolentia, e quibus plerumque profluit sanguis, qui aliquando etiam, nullo tumore apparente, ex ano stillat.

Species sunt

1. Hæmorrhoids (*tumens*) externa a mariseis.

Variat,

A. Cruenta.

B. Mucosa.

2. Hæmorrhoids (*procidens*) externa a procidentia ani.
3. Hæmorrhoids (*fluens*) interna absque tumore externo, vel procidentia ani.
4. Hæmorrhoids (*cæca*) cum dolore et tumore ani, sine profusione sanguinis.

GENUS XXXVIII. MENORRHAGIA.

Dorsi, lumborum, ventris, parturientium instar, dolores; menstruorum copiosior, vel sanguinis e vagina præter ordinem fluxus.

Species sunt

1. Menorrhagia (*rubra*) eruenta in non gravidis nec puerperis.
2. Menorrhagia (*abortús*) eruenta in gravidis.
3. Menorrhagia (*lochialis*) eruenta in puerperis.
4. Menorrhagia (*vitiorum*) eruenta ex vitio locali.
5. Menorrhagia (*alba*) serosa sine vitio locali in non gravidis.
6. Menorrhagia (*nabothi*) serosa in gravidis.

Menorrhagiam serosam, sive leucorrhæam ex vitio locali, ad morbos locales referendam esse censeo.

Hæmorrhagiæ sequentes plerumque, si non semper, symptomaticæ sunt.

Stomacace.

Vel scorbuti, vel vitii oris, vel injuriæ externæ, symptoma est.

Hæmatemesis.

Plerumque hæmorrhagiæ solitæ vicaria est, vel vitii ventriculi localis, vel morbi nigri, vel denique vis externæ, symptoma est.

Hæmaturia.

Plerumque calculi renalis, aliquando febrium putridarum symptoma est.

Cystirrhagia.

Plerumque calculi vesicalis, rarius alius morbi vesicæ, symptoma.

ORD. V. PROFLUVIA.

Pyrexia cum excretionē aucta, naturaliter non sanguinea.

GENUS XXXIX. CATARRHUS.

Pyrexia sæpe contagiosa; muci, ex glandulis membranæ narium, faucium, vel bronchiorum, excretio aucta; saltem hujus excretionis molimina.

Species sunt

Sp. 1. Catarrhus à frigore.

Sp. 2. Catarrhus à contagio.

GENUS XL. DYSENTERIA.

Pyrexia contagiosa; dejectiones frequentes, mucosæ, vel sanguinolentæ, retentis plerumque fæcibus alvinis; tormina; tenesmus.

Variat,

1. Vermibus comitata.
2. Rejectis moleculis carnosis, vel sebaceis.
3. Febre intermittente comitata.
4. Sine sanguine.
5. Miliariâ comitata.

CL. II. NEUROSES.

Sensus et motus læsi, sine pyrexia idiopathica, et sine morbo locali.

ORD. I. COMATA.

Motus voluntarii imminuti, cum sopore sive sensuum feriatiōe.

GENUS XLI. APOPLEXIA.

Motus voluntarii fere omnes imminuti, cum sopore, plus minus profundo, superstitute motu cordis et arteriarum.

Apoplexia idiopathicæ species sunt,

1. Apoplexia (*sanguinea*) eum signis plethoræ universalis, et præcipue capitis.
2. Apoplexia (*serosa*) in corpore, plerumque senum, leucophlegmatico.
3. Apoplexia (*hydrocephalica*) paulatim adoriens; infantes et impuberes, primum lassitudine, febriculâ, et dolore capitis, dein pulsu tardiore, pupillæ dilatatione, et somnolentiâ afficiens.
4. Apoplexia (*atrabilaria*) in corpore melancholico.
5. Apoplexia (*traumatica*) a vi externa mechanicâ, capiti illata.
6. Apoplexia (*venenata*) a potentiis sedantibus interne vel externe adhibitis.
7. Apoplexia (*mentalis*) a pathemate mentis.
8. Apoplexia (*cataleptica*) musculis, sub artuum a vi externa motu, contractilibus.
9. Apoplexia (*suffocata*) a potentia externa suffocante.

Apoplexia sæpe symptomatica est,

1. Febris intermittens.
2. Febris continuæ.
3. Phlegmasiæ.
4. Exanthematis.
5. Hysteriæ.

6. Epilepsiæ.
7. Podagræ.
8. Vermium.
9. Ischuriæ.
10. Scorbuti.

GENUS XLII. PARALYSIS.

Motus voluntarii nonnulli tantum imminuti, sæpe cum sopore.

I. Species idiopathicæ sunt

1. Paralysis (*partialis*) quorundam musculorum tantum.
2. Paralysis (*hemiplegica*) alterius corporis lateris.

Variat ratione habitûs corporis.

- a. Hemiplegia in habitu plethorico.
- b. Hemiplegia in habitu leucophlegmatico.
3. Paralysis (*paraplegica*) dimidii corporis transversim sumpti.
4. Paralysis (*venenata*) a potentiis sedantibus externe vel interne adhibitis.

II. Species symptomaticæ sunt

Tremorem, utpote semper symptomaticum, in numerum generum recipere nollem; species autem a Sauvagesio recensitas, prout mihi vel Astheniæ, vel Paralysis, vel convulsionis symptomata esse videntur, hic subjungam.

TREMOR.

Artûs alterna per itus et reditus frequentes motitatio.

1. Species asthenicæ.
2. Species paralyticæ.
3. Species convulsivæ.

ORD. II. ADYNAMIÆ.

Motus involuntarii, sive vitales sive naturales imminuti.

GENUS XLIII. SYNCOPE.

Motus cordis imminutus, vel aliquamdiu quiescens,

I. Idiopathicæ.

1. Syncope (*cardiaca*) sine causâ manifestâ sæpe rediens cum palpitatione cordis vehementi in intervallis: *Ex vitio cordis vel vasorum vicinorum.*
2. Syncope (*occasionalis*) a causâ manifestâ oriens: *Ex affectione totius systematis.*

II. Symptomaticæ, sive symptomata morborum vel totius systematis, vel aliarum præter cor partium.

GENUS XLIV. DYSPEPSIA.

Anorexia, nausea, vomitus, inflatio, ructus, ruminatio, cardialgia, gastrodynia, pauciora saltem vel plura horum simul concurrentia, plerumque cum alvo adstricta, et sine alio vel ventriculi ipsius, vel aliarum partium, morbo.

I. *Idiopathicæ.*II. *Symptomaticæ.*

1. A morbo ipsius ventriculi.
2. A morbo aliarum partium vel totius corporis.

GENUS XLV. HYPOCHONDRIASIS.

Dyspepsia cum languore, mæstitia, et metu, ex causis non æquis, in temperamento melancholico.

GENUS XLVI. CHLOROSIS.

Dyspepsia, vel rei non esculentæ desiderium; cutis pallor vel decoloratio; venæ minus plenæ, corporis tumor mollis; asthenia; palpitatio; menstruorum retentio.

ORD. III. SPASMI.

Musculorum vel fibrarum muscularium motus abnormes.

SECT. I. IN FUNCTIONIBUS ANIMALIBUS.

GENUS XLVII. TETANUS.

Plurium musculorum rigiditas spastica.

Variat gradu

I. Tetanus.

Dimidium vel totum corpus spasmiss affectum.

Variat autem ratione causæ remotæ, quatenus nimirum vel a causa interna, vel a frigore, vel a vulnere oriatur.

Variat etiam quâvis causâ ortus ratione partis corporis affectæ.

II. Trismus. Præcipue maxillæ inferioris Spastica rigiditas.

Species sunt

- a. Trismus (*nascentium*) infantes intra duas primas a natiuitate septimanas corripiens.
- b. Trismus (*traumaticus*) omnium ætatum a vulnere vel frigore.

GENUS XLVIII. CONVULSIO.

Musculorum contractio clonica, abnormis, citra soporem.

I. *Idiopathicæ.*II. *Symptomaticæ.*

GENUS XLIX. CHOREA.

Impuberes utriusque sexus, ut plurimum intra decimum et decimum quartum ætatis annum adorientes, motus convulsivi ex parte voluntarii, plerumque alterius lateris, in brachiorum et manuum motu, histrionum gesticulationes referentes; in gressu, pedem alterum sæpius trahentes quàm attollentes.

GENUS L. RAPHANIA.

Articulorum contractio spastica, cum agitatione convulsiva, dolore violentissimo, periodico.

GENUS LI. EPILEPSIA.

Musculorum convulsio cum sopore.

Species idiopathicæ sunt

1. Epilepsia (*cerebralis*) sine causa manifesta subito adoriens; prægressâ nullâ sensatione molestâ, nisi fortassis vertiginis vel scotomiæ alicujus.
2. Epilepsia (*sympathica*) sine causi manifesta; sed prægressâ sensatione auctæ cujusdam a parte corporis quadam versus caput assurgentis.
3. Epilepsia (*occasionalis*) ab irritatione manifesta oriens, et ablatâ irritatione cessans.

Variat pro diversitate irritamenti, et hinc,

- a. Ab injuria capiti illata.
- b. A dolore.
- c. A vermibus.
- d. A veneno.
- e. A scabie, vel alia acris humoris effusione retropulsa.
- f. A cruditate ventriculi.
- g. A pathemate mentis.
- h. Ab hæmorrhagia nimia.
- i. A debilitate.

SECT. II. IN FUNCTIONIBUS VITALIBUS.

A. In actione cordis.

GENUS LII. PALPITATIO.

Motus cordis vehemens, abnormis.

Palpitatio (*cardiaca*) fere constans, saltem sæpe rediens, sine alio morbo evidente.

B. In actione pulmonum.

GENUS LIII. ASTHMA.

Spirandi difficultas per intervalla subiens; cum angustię in pectore sensu, et respiratione cum sibilo strepente; tussis

sub initio paroxysmi difficilis, vel nulla, versus finem libera, cum sputo mucī sæpe copioso.

a. Species idiopathicæ sunt,

1. Asthma (*spontaneum*) sine causa manifesta, vel alio morbo comitante.
2. Asthma (*exanthematicum*) a scabie vel alia acris effusione retropulsa.
3. Asthma (*plethoricum*) a suppressa evacuatione sanguinis antea solita, vel a plethora spontanea.

b. Species symptomaticæ.

GENUS LIV. DYSPNŒA.

Spirandi difficultas perpetua, sine angustia, et potius cum repletionis et infarctûs in pectore, sensu. Tussis per totum morbi decursum frequens.

Species idiopathicæ sunt,

1. Dyspnœa (*catarrhalis*) cum tussi frequente, mucum viscidum copiosum ejiciente.
2. Dyspnœa (*sicca*) cum tussi plerumque sicca.
3. Dyspnœa (*aërca*) a minima quavis tempestatum mutatione aucta.
4. Dyspnœa (*terrea*) cum tussi materiem terream vel calculosam ejiciente.
5. Dyspnœa (*aquosa*) cum urina parca et œdemate pedum, sine fluctuatione in pectore, vel aliis characteristicis hydrothoracis signis.
6. Dyspnœa (*pinguedinosa*) in hominibus valde obesis.
7. Dyspnœa (*thoracica*) a partibus thoracem cingentibus læsis, vel male conformatis.
8. Dyspnœa (*extrinseca*) a causis externis manifestis.

Dyspnœæ species symptomaticæ sunt symptomata,

1. Morborum cordis, vel vasorum majorum.
2. Tumoris abdominalis.
3. Variorum morborum.

GENUS LV. PERTUSSIS.

Morbus contagiosus; tussis convulsiva, strangulans, cum inspiratione sonora, iterata; sæpe vomitus.

SECT. III. IN FUNCTIONIBUS NATURALIBUS.

GENUS LVI. PYROSIS.

Epigastrii dolor urens, cum copia humoris aquei plerumque insipidi, aliquando acris, eructata.

Scotis, the Water-Brash.

1. Species unica vera.
2. Species symptomaticæ.

GENUS LVII. COLICA.

Dolor abdominis, præcipue eirea umbilicum torquens; vomitus; alvus adstricta.

Species idiopathiæ sunt

1. Colica (*spasmodica*) eum retractione umbilici et spasmis musculorum abdominalium.

Variat symptomatis superadditis; hinc,

- a. Colica cum vomitu stereoris, vel rerum per anum injectarum.
- b. Colica cum inflammatione superveniente.
2. Colica (*pictonum*) præeunte ponderis vel molestiæ in abdomine, præcipue circa umbilicum, sensu: accedente dolore colico, primum levi, non continuo, et præcipue post pastum aucto; tandem graviore et fere perpetuo; eum dolore brachiorum, et dorsi, in paralysin demum abeunte.

Variat ratione causæ remotæ; et hinc

- a. A veneno metallico.
- b. Ad acidis ingestis.
- c. A frigore.
- d. A contusione dorsi.

3. Colica (*stercorea*) in hominibus alvi tardæ, post diuturnam alvi obstipationem.
 4. Colica (*accidentalis*) a materie acri ingesta.
 5. Colica (*meconialis*) neophytorum a meconio retento.
 6. Colica (*callosa*) eum sensu in quadam intestinorum parte stricturæ, et sæpe ante eam collecti flatûs cum aliquo dolore, qui flatus etiam per eandem paulatim transiens evanesceit alvo tardâ, et tandem non nisi fæces naueas liquidas egerente.
 7. Colica (*calculosa*) eum duritie in quadam parte abdominis fixa; calculis quondam per anum dejectis.
- Colica symptomaticæ sunt.

GENUS LVIII. CHOLERA.

Humoris biliosi vomitus ejusdem simul dejectio frequens; anxietas; tormina; surarum spasinata.

a. Species idiopathicæ sunt.

1. Cholera (*spontanea*) tempestate calidâ, sine causa manifesta oboriens.
2. Cholera (*accidentalis*) a rebus aeribus ingestis.

b. Cholerae symptomaticæ.

GENUS LIX. DIARRHŒA.

Dejectio frequens; morbus non contagiosus, pyrexia nulla primaria.

1. Species idiopathicæ sunt

1. Diarrhœa (*crapulosa*) qua stercora naturalibus liquidiora et majori copiâ dejectiuntur.
2. Diarrhœa (*biliosa*) qua fæces flavæ magna copia dejectiuntur.
3. Diarrhœa (*mucosa*) qua, vel ab aeribus ingestis, vel a frigore, præcipue pedibus applicato, mucus copiosus dejectitur.
4. Diarrhœa (*cæliaca*) qua humor lacteus specie chyli dejectitur.

5. Diarrhœa (*typhenteria*) qua ingesta parum mutata celeriter dejiçiuntur.

6. Diarrhœa (*hepatirrhœa*) qua matieres serosocruenta, sine dolore dejiçitur.

II. Symptomaticæ.

GENUS LX. DIABETES.

Urinæ plerumque præternaturalis, copiâ immodicâ, profusio chronica.

a. Species idiopathicæ sunt

Diabetes (*mellitus*) cum urina odoris, coloris, et saporis mellei.

II. Diabetes (*insipidus*) cum urina limpida non dulci.

b. Symptomaticæ.

GENUS LXI. HYSTERIA.

Ventris murmura: sensus globi in abdomine se volventis, ad ventriculum et fauces ascendentis, ibique strangulantis; sopor; convulsionones; urinæ limpidæ copia profusa; animus nec sponte, varius et mutabilis.

Quatenus species differat hysteria idiopathica dicere non possum, nec, ut opinor, recte dixit Sauvagesius. Species enim ab eo recensitæ non, nisi ratione causæ remotæ, varietates esse mihi videntur. Ita habet

A. Ad emansione mensium.

B. A menorrhagia cruenta.

C. A menorrhagia serosa, sive fluore albo.

D. A viscerum obstructione.

E. A vitio stomachi.

F. A salacitate nimia.

Symptomaticæ.

GENUS LXII. HYDROPHOBIA.

Potionis cujuslibet, utpote convulsionem pharyngis dolentem

cientis, fastidium et horror; plerumque e morsu animalis rabidi.

Species sunt

- I. Hydrophobia (*rabiosa*) cum mordendi cupiditate, ex morsu animalis rabidi.
- II. Hydrophobia (*symplex*) sine rabie, vel mordendi cupiditate.

ORD. IV. VESANIÆ.

Mentis judicantis functiones læsæ sine pyrexia vel comate.

GENUS LXIII. AMENTIA.

Mentis judicantis imbecillitas, qua homines rerum relationes, vel non percipiunt, vel non reminiscuntur.

Species sunt

- I. Amentia (*congenita*) a nativitate constans.
- II. Amentia (*senilis*) ex perceptione et memoria, ingravescente ætate, imminutis.
- III. Amentia (*acquisita*) a causis externis evidentibus hominibus sanæ mentis superveniens.

GENUS LXIV. MELANCHOLIA.

Insania partialis sine dyspepsia.

Variat pro varietate rerum de quibus homo delirat.

Ita est

1. Cum hallucinatione de statu corporis sui a levibus causis periculoso; vel de statu rerum suarum tristi metuendo.
2. Cum hallucinatione de statu rerum suarum jueundo.
3. Cum amore velicenti sine satyriasi vel nymphomania.
4. Cum superstitioso futurorum metu.
5. Cum aversatione motûs et omnium vitæ officiorum.
6. Cum inquietudine et statûs cujusvis impatientia.
7. Cum tædio vitæ.

8. Cum hallucinatione de suæ speciei natura.

Dæmonomaniam nullam veram esse censeo, et nostra sententia species sub hoc titulo a SAUVAGESIO recensitæ sunt, vel,

1. Species melancholiæ sive maniæ;
- vel 2do. Morbi ab adstantibus ad dæmonum potentiam falsa relati;
- vel 3tio. Morbi omnino simulati;
- vel 4to. Morbi partim veri, ut No. 1. partim simulati, ut 3tio. recensiti.

GENUS LXV. MANIA.

Insania universalis.

1. Mania (*mentalis*) omnino a pathemate mentis.
2. Mania (*corporea*) a vitio corporis evidente.

Variat pro varietate vitii corporis.

3. Mania (*obscura*) prægresso nullo vel pathemate mentis, vel vitio corporis evidente.

Maniæ species symptomaticæ sunt

1. Paraphrosyne a venenis.
2. Paraphrosyne febrilis.

GENUS LXVI. ONEIRODYNIA.

In somno imaginatio vehementior vel molesta.

1. Oneirodynia (*activa*) excitans ad ambulationem, et motus varios.
2. Oneirodynia (*gravans*) ex sensu ponderi alicujus incumbentis, et pectus præcipue comprimentis.

CL. III. CACHEXIÆ.

Totius vel magnæ partis corporis habitus depravatus; sine pyrexia primaria vel neurosi.

ORD. I. MARCORES.

Corporis totius macies.

GENUS LXVII. TABES.

Marcor ; asthenia ; pyrexia' hectica :

Species sunt

1. Tabes (*purulenta*) ex ulcere externo vel interno, vel ex vomica.

Variat sede.

2. Tabes (*scrophulosa*) in corporibus scrophulosis.
3. Tabes (*venenata*) a veneno ingesto.

GENUS LXVIII. ATROPHIA.

Marcor et asthenia, sine pyrexia hectica.

Species sunt

1. Atrophia (*inanitorum*) ex evacuatione nimia.
2. Atrophia (*famelicorum*) a nutrimento deficiente.
3. Atrophia (*cacochymica*) a nutrimento corrupto.
4. Atrophia (*debilium*) a nutritionis functione depravata, prægressâ nullâ vel evacuatione nimîâ vel cacochymiâ.

ORD. II. INTUMESCENTIÆ.

Totum vel magna corporis pars extrorsum tumens.

SECT. I. ADIPOSÆ.

GENUS LXIX. POLYSARCIA.

Corporis pinguedinosa intumescencia molesta.

Species unica.

SECT. II. FLATUOSÆ.

GENUS LXX. PNEUMATOSIS.

Corporis intumescencia tensa, elastica, sub manu crepitans.

Species sunt

1. Pneumatosi (*spontanea*) sine causa manifesta.
2. Pneumatosi (*traumatica*) a vulnere thoracis.

3. Pneumatosis (*venenata*) a veneno injecto vel applicato.
4. Pneumatosis (*hysterica*) cum hysteria.

GENUS LXXI. TYMPANITES.

Abdominis intumescencia tensa, clastica, sonora; alvus adstricta; cæterarum partium macies.

Species sunt

1. Tympanites (*intestinalis*) cum tumore abdominis sæpe inæquali, et cum rejectione aëris frequenti, tensionem et dolorem levante.
2. Tympanites (*abdominalis*) cum resonitu evidentiore, tumore magis æquabili, et emissionem flatuum rariore et minus levante.

GENUS LXXII. PHYSOMETRA.

Tumor levis, elasticus, in hypogastrio figuram et sedem uteri referens.

SECT. III. AQUOSÆ, sive HYDROPEs.

GENUS LXXIII. ANASARCA.

Corporis totius vel partis ejus intumescencia mollis, inelastica.

Species sunt

1. Anasarca (*serosa*) a retento sero ob evacuationes solitas suppressas, vel ab aucto sero ob ingestam aquam nimiam.
2. Anasarca (*oppilata*) a compressionem venarum.
3. Anasarca (*exanthematica*) post exanthematæ, et præcipue post erysipelas, suborta.
4. Anasarca (*anæmia*) a tenuitate sanguinis per hæmorrhagiam producta.
5. Anasarca (*debilium*) in debilibus a morbis longis, vel ab aliis causis.

GENUS LXXIV. HYDROCEPHALUS.

Capitis intumescencia mollis, inelastica, hiantibus cranii suturis.

Species unica.

GENUS LXXV. HYDRORACHITIS.

Tumor supra vertebrae lumborum, molliis, exiguus, hiantibus vertebrae.

GENUS LXXVI. HYDROTHORAX.

Dyspnœa; faciei pallor; pedum œdemata; urina parca; decubitus difficilis; subita et spontanea ex somno cum palpitatione excitatio; aqua in pectore fluctuans.

GENUS LXXVII. ASCITES.

Abdominis intumescencia tensa, vix elastica, sed fluctuosa.

Species sunt

1. Ascites (*abdominalis*) cum tumore totius abdominis æquali, et cum fluctuatione satis evidente.

Variat ratione causæ.

- A. Ab oppilatione viscerum.
- B. A debilitate.
- C. A tenuitate sanguinis.

Variat etiam ratione liquidi effusi.

2. Ascites (*saccatus*) cum tumore abdominis, saltem initio, partiali, et cum fluctuatione minus evidente.

GENUS LXXVIII. HYDROMETRA.

Hypogastrii in mulieribus paulatim crescens tumor; uteri figuram referens, pressui cedens fluctuansve; citra ischuriam et graviditatem.

Species per externa signa distinguendæ vix dari possunt.

GENUS LXXIX. HYDROCELE.

Tumor scroti non dolens, paulatim crescens, mollis, fluctuans, pellucidus.

SECT. IV. SOLIDÆ.

GENUS LXXX. PHYSCONIA.

Tumor quandam abdominis partem potissimum occupans, paulatim crescens, nec sonora, nec fluctuans.

GENUS LXXXI. RACHITIS.

Caput magnum antèrius maxime tumens; genicula tumida; costæ depressæ; abdomen tumidum; cætera marcescentia.

Variat,

1. Simplex sine alio morbo.
2. Aliis morbis conjuncta.

ORD. III. IMPETIGINES.

Cachexiæ, cutem et externum corpus præcipue deformantes.

GENUS LXXXII. SCROPHULA.

Glandularum conglobatarum, præsertim in collo, tumores labium superius et columna nasi tumida; facies florida, cutis lævis; tumidum abdomen.

Species sunt.

1. Scrophula (*vulgaris*) simplex, externa, permanens.
2. Scrophula (*mesenterica*) simplex, interna, cum pallore faciei, inappetentia, tumore abdominis, et fœtore fæcum insolito.
3. Scrophula (*fugax*) simplicissima, et tantum circa collum, plerumque a resorptione ex ulceribus capitis proveniens.
4. Scrophula (*Americana*) cum frambœsia conjuncta.

GENUS LXXXIII. SYPHILIS.

Morbus contagiosus, post concubitum impurum et genitalium morbum, ulcera tonsillarum; cutis, præsertim ad marginem capillitii, papulæ corymbosæ, in crustas et in ulcera crustosa abeuntes; dolores ostocopi; exostoses.

GENUS LXXXIV. SCORBUTUS.

In regione frigida post victum putrescentem, salitum, ex animalibus confectum, deficiente simul materia vegetabili recente; asthenia; stomacacæ; in cute maculæ diversicolores, plerumque livescences, præsertim ad pilorum radices.

Variat gradu.

Variat etiam symptomatibus.

GENUS LXXXV. ELEPHANTIASIS.

Morbus contagiosus; cutis crassa, rugosa, aspera, unctuosa, pilis destituta; in extremis artubus anæsthesia; facies tuberibus deformis; vox rauca et nasalis.

GENUS LXXXVI. LEPRO.

Cutis escharis albis, furfuraceis, rimosis, aspera, aliquando sub-
tus humida, pruriginosa.

GENUS LXXXVII. FRAMBŒSIA.

Fungi, mori, vel rubi idæi fructus referentes, in variis cutis
partibus enati.

GENUS LXXXVIII. TRICHOMA.

Morbus contagiosus, capilli solito crassiores, in cirrhos et funiculos inextricabiles implicati.

GENUS LXXXIX. ICTERUS.

Flavido cutis et oculorum, fæces albidæ: urina obscurè rubra,
inmissa colore luteo tingens.

Species idiopathicæ sunt,

1. Icterus (*calculosus*) cum dolore in regione epigastrica acuto, post pastum aucto, et cum dejectione concretionum biliosarum.
2. Icterus (*spasmodicus*) sine dolore, post morbos spasmodicos et pathemata mentis.
3. Icterus (*hepaticus*) sine dolore, post morbos hepatis.
4. Icterus (*gravidarum*) sub graviditate oriens, et post partum abiens.
5. Icterus (*infantum*) in infantibus haud diu post natales oriens.

Species symptomaticæ.

CL IV. LOCALES.

Partis, non totius corporis, affectio.

ORD. I. DYSÆSTHESIÆ.

Sensus depravati aut deleti, ex organorum externorum vitio.

GENUS XC. CALIGO.

Visus imminutus, vel prorsus abolitus, ob repagulum opacum, inter objecta et retinam, oculo ipso vel palpebris inhærens.

Species sunt

1. Caligo (*lentis*) ob maculam opacam pone pupillam.
2. Caligo (*corneæ*) ob corneam opacam.
3. Caligo (*pupillæ*) ob obstructam pupillam.
4. Caligo (*humorum*) ob vitium vel defectum humoris aquei.
5. Caligo (*palpebrarum*) ob vitium palpebris inhærens.

GENUS XCI. AMAUROSIS.

Visus imminutus vel prorsus abolitus, sine vitio oculi evidente; plerumque cum pupilla dilatata et immobili.

Species sunt

1. Amaurosis (*compressionis*) post causas et cum signis congestionis in cerebro.
2. Amaurosis (*atonica*) post causas et cum signis debilitatis.
3. Amaurosis (*spasmodica*) post causas et cum signis spasmi.
4. Amaurosis (*venenata*) a veneno ingesto vel applicato.

GENUS XCII. DYSOPIA.

Visus depravatus, ita ut non nisi certâ luce, vel ad certam distantiam, vel in certa positura, objecta clarè videantur.

Species sunt

1. Dysopia (*tenebrarum*) in qua non nisi in magna luce objecta videntur.
2. Dysopia (*luminis*) in qua non nisi in obscura luce objecta videntur.
3. Dysopia (*dissitorum*) in qua longè distantia non videntur.
4. Dysopia (*proximorum*) in qua proxima non videntur.
5. Dysopia (*lateralis*) in qua non nisi obliquè posita videntur.

GENUS XCIII. PSEUDOBLEPSIS.

Visus depravatus, ita ut quæ non existant homo se videre imaginatur, vel quæ existunt aliter videt ac revera se habcant.

Species sunt,

1. Pseudoblepsis (*imaginaria*) in qua quæ non existntnt conspici videntur.
2. Pseudoblepsis (*mutans*) in qua objecta revera existentia aliquomodo, mutata apparent.

GENUS XCIV. DYSECCEA.

Auditus imminutus vel abolitus.

Species sunt

1. Dysecceæ (*organica*) ob vitium in organis sonos ad internam aurem transmittentibus.
2. Dysecceæ (*atonica*) sine organorum sonos transmittentium vitio evidente.

GENUS XCV. PARACUSIS.

Auditus depravatus.

Species sunt ,

1. Paracusis (*imperfecta*) in qua soni ab externis venientes percipiuntur, non autem accurate vel cum solitis conditionibus.

Variat,

- a. Cum auditu gravi.

- b.* Cum auditu nimis sensibili.
 - c.* Cum sono unico externo a causis internis duplicato.
 - d.* Soni quos homo audire velit, nisi sono alio vehementi simul excitato non audiuntur.
2. Paracusis (*imaginaria*) in qua soni extrinsecus non existentes ab internis causis excitantur.

GENUS XCVI. ANOSMIA.

Olfactus imminutus vel abolitus.

Species sunt

- 1. Anosmia (*organica*) ob vitium in membrana nares internas investiente.
- 2. Anosmia (*atonica*) sine vitio membranæ narium evidente.

GENUS XCVII. AGHEUSTIA.

Gustus imminutus vel abolitus.

Species sunt

- 1. Agheustia (*organica*) ob vitium in membrana linguæ, a nervis sapida arcens.
- 2. Agheustia (*atonica*) sine vitio linguæ evidente.

GENUS XCVIII. ANÆSTHESIA.

Tactus imminutus vel abolitus.

ORD. II. DYSCOREXIÆ.

Appetitus erroneus vel deficiens.

SECT. I. APPETITUS ERRONEI.

GENUS XCIX. BULIMIA.

Appetitus esulentorum majori copia quàm quæ digeri possit.

Species idiopathicæ sunt,

- 1. Bulimia (*belluonum*) sine morbo ventriculi, cibi majorem solita copiam appetens.

2. Bulimia (*syncopalis*) cibum frequenter appetens, ob sensum famis syncopen minitantis.
3. Bulimia (*emetica*) cibum magna copia appetens, et mox per vomitum rejiciens.

Species symptomaticæ.

GENUS C. POLYDIPSIA.

Appetitus majoris solita copię potulentorum.

Polydipsia fere semper symptomatica est, et variat tantum pro varietate morborum quos comitatur.

GENUS CI. PICA.

Desiderium non esculenti ingerendi.

GENUS CII. SATYRIASIS.

In maribus effrænis veneris cupiditas.

Species sunt,

1. Satyriasis (*juvenilis*) cum veneris cupiditate præter modum vehementi, corpore simul parum perturbato.
2. Satyriasis (*furens*) cum veneris cupiditate effræni. corpore simul multum perturbato.

GENUS CIII. NYMPHOMANIA.

In fœminis effræne veneris desiderium.

Nymphomania species unica est, et gradu tantum varians.

GENUS CIV. NOSTALGIA.

In absentibus a patria, vehemens eandem revisendi desiderium.

Species sunt

1. Nostalgia (*simplex*) sine alio morbo.
2. Nostalgia (*complicata*) aliis morbis comitata.

SECT. II. APPETITUS DEFICIENTES.

GENUS CV. ANOREXIA.

Appetitus esculentorum deficiens.

Species sunt

1. Anorexia (*humoralis*) ab humore ventriculorum gravante.
2. Anorexia (*atonica*) ob tonum fibrarum ventriculi amissum.

GENUS CVI. ADIPSIA.

Appetitûs potulentorum suppressio, sive sitis feriatio.

Adipsiam sine alio morbo, qualis est

Adipsia primaria, S. sp. 1.

Pro morbo habere nollem: omnemque adipsiam pro sympathica, sive symptomate morbi cujusdam, sensorium commune afficientis, habeo; ideoque non ad Locales referendi.

GENUS CVII. ANAPHRODISIA.

Libidinis defectus, vel veneris impotentia.

ORD. III. DYSCINESIÆ.

Motus impediti vel depravati ex organorum vitio.

GENUS CVIII. APHONIA.

Vocis plena suppressio, citra coma aut syncopen.

Species sunt

1. Aphonia (*gutturalis*) a tumefactis faucibus et glottide.
2. Aphonia (*trachealis*) a compressa trachea.
3. Aphonia (*atonica*) a nervis laryngis resectis.

GENUS CIX. MUTITAS.

Verba articulandi impotentia.

Species sunt

1. Mutitas (*organica*) ex lingua ablata vel vitiata.
2. Mutitas (*atonica*) ex nervis linguæ læsis.
3. Mutitas (*surdorum*) ex surditate congenita, vel puerilibus annis aborta.

GENUS CX. PARAPHONIA.

Vocis sonus depravatus.

Species sunt

1. Paraphonia (*puberum*) in qua, circa pubertatis tempus, vox ab acutiori et suavi in graviolem et ingratum mutatur.
2. Paraphonia (*rauca*) in qua, ob siccitatem vel tumorem faucium flaccidum, vox fit rauca et scabra.
3. Paraphonia (*resonans*) in qua, ob obstructas nares, vox fit rauca, cum sonitu per nares sibilante.
4. Paraphonia (*palatina*) in qua, ob deficientem vel divisam uvulam, plerumque cum labio leporino, vox fit rauca, obscure, et ingrata.
5. Paraphonia (*clangens*) in qua vox in acutam, clangentem, et exilem mutatur.
6. Paraphonia (*comatosa*) in qua, ob laxatum velum palati et glottidem, sonus inter inspirandum editur.

GENUS CXI. PSELLISMUS.

Verba articulandi vitium.

Species sunt

1. Psellismus (*hæsitans*) in quo sermonis verba, præsertim prima, non facile proferuntur, et non nisi prima syllaba sæpius repetita.
2. Psellismus (*ringens*) in quo sonus literæ R semper aspiratur, et quasi geminatur.
3. Psellismus (*lallans*) in quo sonus literæ L fit liquidior, vel loco literæ R pronunciatur.
4. Psellismus (*cmolliens*) in quo literæ duræ in molliores mutantur, et literæ S multum usurpatur.
5. Psellismus (*balbutiens*) in quo, ob linguam magnam vel tumefactam, literæ labiales magis audiuntur, et sæpe loco aliarum proferuntur.
6. Psellismus (*acheilos*) in quo literæ labiales vix vel non omnino pronunciari possunt.
7. Psellismus (*lagostomatium*) in quo, ob divisum palatum, literæ gutturales minus recte pronuntiantur.

GENUS CXII. STRABISMUS.

Oculorum axes optici non convergentes.

Species sunt

1. Strabismus (*habitualis*) a consuetudine prava oculo tantum uno utendi.
2. Strabismus (*commodus*) ab unius oculi, præ altero debilitate vel mobilitate majori, adeo ut uterque oculus non commode adhibeatur.
3. Strabismus (*necessarius*) ob mutatum situm vel figuram partium oculi.

GENUS CXIII. DYSPHAGIA.

Molestia deglutionem impediens sine respirationis læsione vel phlegmasia.

GENUS CXIV. CONTRACTURA.

Artûs unius vel plurimum contractio diuturna, rigida.

Species sunt

1. Contractura (*primaria*) a musculis contractis, rigidis.
 - a. A musculis ab inflammatione rigidis.
 - b. A musculis a spasmo rigidis.
 - c. A musculis, ob antagonistas paralyticos, contractis.
 - d. A musculis ab acrimonia irritante contractis.
2. Contractura (*articularis*) ob artus rigidos.

ORD. IV. APOCENOSES.

Fluxus sive sanguis, aut humores alii, solito uberius profluens, sine pyrexia impetuve fluidorum aucto.

GENUS CXV. PROFUSIO.

Fluxus sanguinis.

GENUS CXVI. EPIDROSIS.

Sudoris præter naturam evacuatio.

Species idiopathica unica est.

Ephidroses symptomaticæ variant, pro varietate morbi quem comitantur, et simul pro varietate sudoris elicit, et quodammodo pro varietate partis maximè sudantis.

GENUS CXVII. EPIPHORA.

Fluxus humoris lachrymalis,

- a. Idiopathica.
- b. Symptomatica.

GENUS CXVIII. PTYALISMUS.

Fluxus salivæ.

- a. Idiopathicus.
- b. Symptomaticus.

GENUS CXIX. ENURESIS.

Urinæ a vesica fluxus involuntarius non dolens.

Species sunt

1. Enuresis (*atonica*) post morbos sphincterem vesicæ lædentes.
2. Enuresis (*irritata*) a compressione vel irritatione vesicæ.

GENUS CXX. GONORRŒA.

Humoris ex urethra, in maribus, eum vel absque libidine præter naturam fluxus.

Species sunt

1. Gonorrhœa (*pura*) in qua, prægresso coneubitu impuro nullo, humor puriformis, sine dysuria vel libidine, ex urethra subinde fluit.
2. Gonorrhœa (*impura*) in qua, post concubitum impurum, humor puriformis eum dysuria ex urethra fluit.

Hujus sequela est.

Gonorrhœa (*mucosa*) in qua, post gonorrhœam impurum, humor mucosus, cum minima vel nulla dysuria, ex urethra subinde fluit.

Anglis, a GLEET.

3. Gonorrhœa (*laxorum*) in qua, humor plerumque pel-lucidus, sine penis erectione, sed cum libidine, in vigi-lante, ex urethra subinde fluit.
4. Gonorrhœa (*dormientium*) in qua liquor seminalis cum erectione et libidine, in dormientibus, ex somnio libi-dinoso, ejicitur.

ORD. V. EPISCHIESES.

Excernendorum suppressiones.

GENUS CXXI. OBSTIPATIO.

Dejectio fæcum nulla vel solita rarior.

Species sunt

1. Obstipatio (*debilium*) in hominibus laxis, debilibus, et plerumque dyspepticis.
2. Obstipatio (*rigidorum*) in hominibus fibræ rigidæ sæpe hypochondriacis.
3. Obstipatio (*obstructorum*) cum symptomatis Colicæ 1 mae, 2dae, 4tae, vel 7mae, supra dictæ.

GENUS CXXII. ISCHURIA.

Urinæ suppressio absoluta.

Species sunt

1. Ischuria (*renalis*) prægresso renum morbo, cum dolore, vel molesto gravitatis sensu, in regione renum, et sine hypogastrii tumore, vel ad mingendum stimulo.

Variat pro varietate causæ.

2. Ischuria (*ureterica*) prægresso renum morbo, cum do-loris vel molestiæ sensu in quadam ureteris parte, et hypogastrii tumore, vel ad mingendum stimulo.

Variat pro varietate causæ.

3. Ischuria (*vesicalis*) cum tumore hypogastrii, dolore ad cervicem vesicæ, et frequenti ad mingendum stimulo.

Variat pro varietate causæ.

4. Ischuria (*urethralis*) cum tumore hypogastrii, frequenti

ad mingendum stimulo, et dolore in aliqua parte urethra.

Variat pro varietate causæ.

GENUS CXXIII. DYSURIA.

Dolorifica et quodammodo impedita urinæ emissio.

Species sunt

1. Dysuria (*ardens*) cum ardore urinæ sine morbo vesicæ evidente.
2. Dysuria (*spasmodica*) a spasmo ex alijs partibus cum vesicæ communicato.
3. Dysuria (*compressionis*) a vicinis partibus vesicam prementibus.
4. Dysuria (*phlogistica*) a vicinis partibus inflammatis.
5. Dysuria (*irritata*) eum signis caleuli vesicalis.
6. Dysuria (*mucosa*) eum exeretione muci copiosa.

GENUS CXXIV. DYSPERMATISMUS.

Seminis in actu venereo tarda, impedita, et ad generationem insufficiens emissio.

Species sunt,

1. Dyspermatismus (*urethralis*) a morbis urethræ.
2. Dyspermatismus (*nodosus*) a nodis corporum cavernosorum.
3. Dyspermatismus (*præputialis*) ab angustiori præputii orificio.
4. Dyspermatismus (*mucosus*) a mucus urethram infarente.
5. Dyspermatismus (*hypertonicus*) a validiori penis erectione.
6. Dyspermatismus (*epilepticus*) ab epilepsia spasmodica in coitu adveniente.
7. Dyspermatismus (*apractodes*) a genitalium ignavia.
8. Dyspermatismus (*refluus*) in qua nulla seminis in coitu emissio, ob refluxum ejusdem ex urethra in vesicam.

GENUS CXXV. AMENORRHŒA.

Menses tempore quo fluere solent, vel solito parciore, vel non omnino fluentes, citra graviditatem.

Species sunt

1. Amenorrhœa (*emansionis*) in pueribus quibus post fluxûs tempus solitum, menses non jam prodierint, et cum simul variæ affectiones morbidæ adsint.
2. Amenorrhœa (*suppressionis*) in adultis, quibus menses, quæ jam fluere solebant, suppressæ sunt.
3. Amenorrhœa (*difficilis*) in qua menses parciùs et cum dolore fluunt.

ORD. VI. TUMORES.

Partis magnitudo aucta sine phlogosî.

GENUS CXXVI. ANEURISMA.

Tumor mollis, pulsans, supra arteriam.

GENUS CXXVII. VARIÆ.

Tumor mollis non pulsans, supra venam.

GENUS CXXVIII. ECCHYMOA.

Tumor diffusus, parum eminens, livescens.

GENUS CXXIX. SCHIRRHUS.

Partis, plerumque glandulæ, tumor durus, non dolens, ægrè suppurans.

GENUS CXXX. CANCER.

Tumor scirrhodeus dolens, in ulcus mali moris abiens.

GENUS CXXXI. BUBO.

Glandulæ conglobatæ tumor suppurans.

GENUS CXXXII. SARCOMA.

Extuberatio mollis, non dolens.

GENUS CXXXIII. VERRUCA.

Extuberatio durior, scabra,

GENUS CXXXIV. CLAVUS.

Cuticulæ crassities dura, lamellata.

GENUS CXXXV. LUPIA.

Extuberatio subter eutem mobilis, mollis, non dolens.

GENUS CXXXVI. GANGLION.

Extuberatio durior, mobilis, tendini insidens.

GENUS CXXXVII. HYDATIS.

Vesicula cuticularis humore aqueo plena.

GENUS CXXXVIII. HYDARTHROS.

Articulorum, genu potissimum, tumor, parum primò eminens,
cuti concolor, dolentissimus, et mobilitatem imminuens.
Anglis, a WHITE SWELLING.

GENUS CXXXIX. EXOSTOSIS.

Tumor durus ossi insidens.

ORD. VII. ECTOPIÆ.

Pars ex sua sede dimota tumorem faciens.

GENUS CXL. HERNIA.

Partis mollis ectopia, eute et aliis integumentis adhuc teeta.

GENUS CXLI. PROLAPSUS.

Partis mollis ectopia nuda.

GENUS CXLII. LUXATIO.

Os ex sua in juncturis sede dimotum.

ORD. VIII. DIALYSES.

Solutio continui visu tactuve manifesta.

GENUS CXLIII. VULNUS.

Soluta unio recens cruenta partis mollis, a corpore duro moto.

GENUS CXLIV. ULCUS.

Partis mollis solutio purulenta vel ichorosa.

GENUS CXLV. HERPES.

Phlyctænæ vel ulcuscula plurima, gregalia, serpentina, dysepu-
leta.

GENUS CXLVI. TINEA.

In cute capillata ad radices capillorum ulcuscula, humorem,
in crustam albam friabilem abeuntem, fundentia.

GENUS CXLVII. PSORA.

Pustulæ et ulcuscula pruginosa, contagiosa, manus male ha-
bens.

GENUS CXLVIII. FRACTURA.

Ossis partes a cohæsione in magna fragmenta vi solutæ.

GENUS CXLIX. CARIES.

Ossis exulceratio.

CLASS I. PYREXIAL AFFECTIONS.

Definition. — After rigors a quick pulse, increase of heat, functional læsion with diminished powers, particularly of the limbs.

ORDER I. FEVERS.

Pyrexia succeeding to languor, lassitude, and other marks of debility, without local affection.

SECT. I. INTERMITTENTS.

Fevers produced by the poison of marshes, consisting of many paroxysms, the pyrexia for a time leaving the patient, or at least remission of the fever being decided, and the return of the paroxysm being usually preceded by rigors. Only one paroxysm during a day.

GENUS I. TERTIAN.

After an interval of about forty-eight hours, the paroxysms recurring, their accession being at noon.

GENUS II. QUARTAN.

Intervals of about seventy-two hours. Accession in the afternoon.

GENUS III. QUOTIDIAN.

Intervals of about twenty-four hours. Accession in the morning.

Symptoms of Intermittents. — Decided and completely marked *cold stage*; in which we find paleness, collapse, impaired sensibility, pulse small and frequent, respiration short; the coldness more or less diffused, followed by general rigors and universal shivering.

Hot stage. — The heat returns partially and irregularly,

at length becoming universal, and much above the standard of health. Fulness of the surface takes the place of previous collapse or shrinking; pains are felt in different parts, the pulse acquires strength and hardness, the tongue becomes covered with a white crust, the urine is high-coloured, and thirst prevails.

Sweating stage. — The moisture usually begins on the forehead, face, and neck, but soon extends universally, heat abates, thirst ceases, the urine throws down a sediment, respiration becomes free, and the functions are restored to their wonted state.

Remarks. — We have only, it will be seen, retained the tertian, quartan, and quotidian intermittents, since the subdivisions, even if they are traceable, are of no practical moment. The recurrence of the paroxysm it will be recollected is dated from the commencement, not from the decline of the preceding fit. The tertian type is the most prevalent, and principally occurs in the spring. The quartan the most severe, and more common to autumn. The quotidian more readily than the others changes into a remittent and continued fever. Six hours is the average time of the whole paroxysm. The quartan has the cold stage the longest, and the tertian has the longest hot stage.

CAUSES.—1st. *Predisposing.* Poverty of diet, depression of spirit, suppressed evacuations, repelled eruption, intemperance of any kind; lying on damp ground, or in damp sheets: in fine, whatever tends to debilitate the frame, or derange the functions.

2d. *Exciting.* Marsh miasmata. Other excitants doubtful. (See part 1st, p. 47.) After an intermittent has once existed, it may return, without its specific excitant; the predisposing then, becoming the exciting cause.

PROGNOSIS. — In the general favourable, as far as the question of life and death is concerned ; but the disorder is apt, under unfavourable circumstances, or injudicious treatment, to complicate itself with other derangements, such as visceral infarctions, especially of the spleen and liver ; dropsy, jaundice, and dysentery.

When the paroxysms are of short duration, and regular recurrence, a speedy solution of the disease may be expected ; but when they are of long continuance, and attended with great derangement of function, such as vertigo, delirium, tenderness upon pressing the abdomen, coma followed by convulsions, great irregularity of bowels, dry tongue, and fœtid excretions, the disorder is protracted, and the recovery doubtful.

TREATMENT. Indications are, first, to abate the violence of the paroxysm, and, second, to prevent its return.

During the cold stage give warm diluent liquids ; apply warm fomentations to the feet and legs ; use warm bathing, and administer cordial diaphoretics.

R Ammoniæ subcarbonatis gr. vj.
Liquoris ammoniæ acetatis f. ʒijj.
Syrupi aurantiorum f. ʒij.
Aquæ puræ f. ʒj.

Fiat haustus.

R Antimonii tartarizati gr. j.
Syrupi papaveris f. ʒ iss.
Aquæ puræ f. ʒ ivss.

Fiat mistura. Cujus sumat æger cochlearia duo magna.

R Liquoris ammoniæ acetatis f. ʒ ss.
Vini ipecacuanhæ m xxv.
Misturæ camphoræ f. ʒ j.
Sruypi papaveris f. ʒj.

Fiat haustus.

From thirty to sixty drops of tinctura opii upon the accession of the fit; or a fluidrachm of sulphuric ether undiluted. Apply tourniquets to the limbs for a quarter of an hour. An emetic before the occurrence of the cold stage.

Upon the occurrence of the hot stage, administer saline, or antimonial, or other diaphoretics, according to the degree of heat, and strength of action. Tinctura opii? Venæsection? For local congestions, leeches, blisters.

R Antimonii tartarizati gr. $\frac{1}{6}$.

Aquæ puræ f. ʒ iss.

Fiat haustus.

R Pulveris potassæ nitratis ʒ ss.

Syrupi simplicis ʒ j.

Aquæ puræ f. ʒ iss.

Fiat haustus.

In case of constipation being combined with the pyrexia, sulphas magnesiæ may be administered, either in full doses of an ounce, or in drachm doses, combined with saline medicinals; and in some of these combinations we need not be too much restricted by the laws of chemical affinity.

R Magnesiae sulphatis ʒ j.

Liquoris ammoniæ acetatis f. ʒ ss.

Aquæ puræ f. ʒ iss.

Fiat haustus.

To accomplish the second indication, remedies are had recourse to in the intermission; and of these, emetics purgatives, Peruvian bark, arsenic, and forcible impressions made upon the patient's mind, are the principal.

R Zinci sulphatis ʒj.

Aquæ puræ ʒ iss.

Fiat haustus emeticus.

R Decocti aloes compositi.

Infusi sennæ āā f. ʒj.

Fiat haustus purgans.

R Pulveris cinchonæ ʒj.

Fiat pulvis, secunda quâque horâ durante apyrexia; (to be commenced in cases of long intermissions, eight or ten hours before the expected recurrence of the paroxysm).

R Extracti cinchonæ gr. xv.

Tincturæ cinchonæ compositæ f. ʒij.

Syrupi aurantiorum f. ʒj.

Decocti cinchonæ f. ʒ iss.

Fiat haustus.

The Cascarilla, the Cusparia, and other barks are given for the same purpose as the Peruvian; and also the vegetable bitters and mineral tonics, but not with equal efficacy. It is sometimes found impossible to make the stomach receive a sufficient dose of the bark to answer the intention of the prescriber, and in that case the concentrated form of it, lately introduced into practice, may be had recourse to with much advantage.

R Quininæ sulphatis gr. ij.

Confectionis aromaticæ q. s.

Fiat pilula parva; secunda quâque horâ sumenda.

When arsenic is administered in the cure of intermittents (which, in the general way, is more speedy and efficacious in its operation than even the bark), the liquor arsenicalis of the London Pharmacopœia, which is an

arseniate of potass should be employed; the dose is six minims gradually increased to fifteen or more, two or three times a day. It may be joined with tincture of opium, as in the following formula.

R Liquoris arsenicalis ℥ vj.

Tincturæ opii ℥ v.

Aquæ cinnamomi f. ʒ iss.

Fiat haustus.

“ Eight days administration of this medicine will be generally found sufficient for the radical cure of an intermittent.”

A forcible impression made upon the patient's mind, has often broken the habit of the intermittent, and effected a thorough restoration to health. It is not necessary to say that charms act upon this principle.

When there is a tendency to visceral obstruction, small alterative doses of mercury must be alternated with the other medicinals, or given at night at the time you are employing bark, or arsenic.

R Pilulæ hydrargyri.

Extracti hyoscyami āā gr. v.

Fiant pilulæ duæ; horâ somni omni nocte sumendæ.

R Hydrargyri submuriatis gr. j.

Extracti conii.

———— Hyoscyami āā gr. ij.

Fiat pilula, omni nocte capienda.

While the secretions are attended to, generous diet, and the moderate use of wine will be found requisite during the intermissions. As individuals are especially obnoxious to the recurrence of the malady from slight causes, these of course must be carefully guarded against.

Remittent fevers are to be treated upon the same general principles with intermittent and continued; the one or the other kind of remedy being admissible accordingly, as the state of pyrexia shall be present or absent. Their varieties from endemical causes, are almost endless. (See Part I. page 46.)

SECT. II. CONTINUED FEVERS.

Fever not having intermissions, and not being produced by the poison from marshes; with remissions and exacerbations not always distinctly marked; the paroxysms being two in each day.

GENUS IV. INFLAMMATORY FEVER (*Synocha*).

Heat greatly increased; pulse frequent, strong, and hard; the sensorial functions not much disturbed.

GENUS V. TYPHOID, or LOW FEVER (*Typhus*).

A contagious disease; heat not much increased; pulse small, weak, and frequent; the urine but little altered. Sensorial functions much disturbed, and the strength much diminished.

The species are, petechial fever and yellow fever. The grades are mild (*Typhus Mitior*), and the severe (*Typhus gravior*).

GENUS VI. MIXED FEVER (*Synochus*).

A contagious disease, constituted by a mixture of synocha and typhus; being in the first instance a synocha, and, towards the termination, a typhus.

General Symptoms of continued Fever. — Lassitude and languor, and anxiety, followed by rigors, which are again succeeded by partial, and, at length, universal heat. Pulse more frequent than in health, more or less hard, according to the kind of disorders; thirst;

furred tongue; morbid sensibility to external impression; hurried breathing; confusion of thought; pain in the head and limbs; delirium. The urine, in the different stages and grades of the disorder, undergoes much change; now, pale and in small quantities; then, large in quantity and high in colour.

Remarks. — The student will see, by turning to the first part of the present Compendium, p. 46., that we hold the above distinctions in fever, to be, in a great measure, arbitrary. Of arbitrary divisions, however, nothing perhaps can be nearer nature than those traced by our Nosologist; it may be observed, that he, in some measure, abandons his own postulate of contagion, as an abstract characteristic of one kind of fever, by stating, that a disorder may be, in the commencement, a synocha, which is not contagious; and at the conclusion, a typhus, which is contagious.

CAUSES OF FEVER. *Predisposing Causes.* — Plethoric fulness, high action, sthenic diathesis. These predispose to inflammatory fevers; while the low or typhoid kind, are induced by a weak and delicate habit, depressing passions, poor living, and whatever tends to debilitate. The yellow fever seems to own, as a predisposing cause, biliary redundance and acrimony, occasioned by warmth and other circumstances of climate: these, indeed, when carried to a certain extent, becoming exciting causes of fever. (See Part I. p. 45.).

Exciting Causes. — Contagion, infection, (see Part I. p. 59.), intemperance, famine, filth, confined air, depressing passions; above all, perhaps, variations in atmospheric temperature. Violent exercise, constipated bowels; and, probably, whatever has power to derange the system, has power, under certain circumstances of the patient, to engender fever.

DIAGNOSIS. — As we suppose a sort of identity in fever through its varied incidents, there is some degree of impropriety in distinguishing one from the other. Fevers, however, of the low kind, are often marked, from the first, by a great prostration of strength, which is not so conspicuous in the other. When the disease shows a tendency to become the *typhus gravior*, or putrid fever of systematic authors, we have soon a dry and brown, instead of a white tongue; sordes collect about the teeth; the pulse becomes exceedingly quick, but is more feeble, and not so hard; the delirium is high, while the powers are low; the skin is often intensely hot, and, in place of an inflammatory fulness of surface, a livid appearance, especially of the face is observed.

PROGNOSIS. *Favourable Symptoms.* — The pulse not mounting up to more than 100 beats in a minute; its becoming soft and free, or open, as it is called by some; the urine depositing a lateritious sediment; the tongue becoming moist at its edges; regular warm diaphoresis, as opposed to partial and clammy perspiration; local tendencies in the fevers, such as scabs about the corners of the mouth; the countenance retaining the full and uniform appearance of health, and respiration being free. Deafness, in some fevers, is a favourable symptom.

Unfavourable Symptoms. — Much delirium, whether of the high phrenitic, or low typhoid kind; rapidity of pulse; hurried and laborious respiration, without any indication of pulmonic disease; subsultus tendinum; picking about the bed-clothes; signal prostration of the animal powers, with a tendency always to lying on the back rather than the side, and a sliding or sinking down in the bed; partial and cold perspirations; anguish of countenance and collapse of feature; an indisposition or incapacity to put out the tongue upon being asked so to do; the tongue being covered by a thick brown, and even

blackish sordes; a tense drummy feel of the abdomen; fœtid excretions; cadaverous snell of the body; urine and fœces passing involuntarily; hæmorrhages from the rectum; petechial, or livid spots on the surface; aphthæ.

Critical Days?—We mark these interrogatively, because they are doubtful. One fact, however, appears to be pretty generally admitted, *viz.* that all fevers are disposed to assume progressively the quotidian, tertian, and quartan type; so that, after the disorder shall have lasted some time, two whole days shall intervene between the terminating tendency; as the 14th, 17th, and 20th. Even here, however, there arises a difficulty; some considering the 21st, others the 20th the critical day. It is probable that fevers with us are different, in respect of crisis, from what they were with the antients.

TREATMENT. *Indication 1st.*—To excite a new action in the system, so as to break in upon the series of morbid concatenations; and thus, as it is expressed by authors, cut short the disease.

Indication 2d.—To moderate excitement and heat; subdue inflammatory incidents, and to unloose the locked-up secretions.

Indication 3d.—To keep a watch over the powers of the system, and interpose occasional aid, under circumstances of necessity.

To accomplish the first indication, we have recourse to blood-letting, dashing cold water over the surface of the body, emetics, and brisk cathartics. When the fever is of an inflammatory kind, with a high sthenic diathesis, venæsection may be employed, to the extent of from ten to twenty ounces; which will, probably, in some instances, make such an impression upon the frame, as to put at once a stop to the fever, or, at any rate, moderate the violence of it during its course. The same object is said

to be occasionally accomplished, by dashing cold water freely over the naked and heated surface, in the first day or two of the fever. Emetics will sometimes effect the same purpose.

R Pulveris ipecuanhæ ʒj.

Antimonii tartarizati gr. j.

Fiat pulvis emeticus.

R Vini ipecacuanhæ ʒij.

Antimonii tartarizati gr. j.

Fiat haustus emeticus.

A combination of ipecacuanha and antimony is, for the most part, desirable in the commencement of continued fever, as it proves diaphoretic as well as emetic.

Purgatives, to accomplish the object of breaking in forcibly upon the course and continuance of fever, must be drastic. Elaterium, I consider the best.

R Extracti elaterii gr. j.

Confectionis aromaticæ quantum sufficit ut pilula parva formetur, quamprimum sumenda.

Other purgatives may be employed with the same intention, but they are of doubtful efficacy. Indeed, some authors have contended, that we have no power to arrest febrile action in the way now supposed.

Indication 2d. — Blood-letting, cold affusion or ablution, purgatives, diaphoretics, diuretics, and refrigerants are now resorted to upon different principles, and are to be employed with more or less freedom and frequency, as the excitement and heat are high, the powers vigorous, and the tendency to local inflammation or congestion great. When topical affections are urgent, at the same time that the vital

powers are low, leeches and cupping near the affected parts are to be preferred to bleeding. It ought, however, always to be recollected, that it is rather smothered or obstructed strength, that we have to deal with in fever, than actual or positive debility; and that the moderate use of the lancet, in cases calling for its employment, may, for the most part, be resorted to in the early stages of the disease, without fear of consequences: some fevers, however, will be found not to bear bleeding, even though excitement and power seem considerable. And authors, in their direction respecting venæsection, are too apt, I think, to overlook very frequent exceptions to general rules. Endemic and epidemic peculiarities ought always to be carefully appreciated by the physician. For months together, at times, and without any external circumstances to explain the reason, fevers demand a different treatment from what may be ordinarily pursued, or the patient will fall a victim to the practitioner's systematic obstinacy.

Cold affusion or ablution also of the surface, will be found, in some cases, highly useful when the skin is steadily hot and without perspiration. It often conduces to a moisture on the skin, with more effect than sudorific medicines; and, in many cases, will be found materially to assist the operation of the last.

Purgatives are almost invariably called for in all kinds, and, I was going to say, in all stages of fever. To keep the alimentary and intestinal canal free, is one of the most important principles in the conducting fevers to a favourable termination. When visceral infarctions are present, mercurial preparations may precede saline and other purgatives; but, for the most part, the continued fevers that are met with in this country, do not require the large doses of calomel which some practitioners have recommended.

Diaphoretics, especially those of the saline and cooling kind, are valuable medicinals in the management of fever; and it is, in my mind, questionable, whether what I would call the vascular and ventricular views, that have lately been so much taken of disorder, may not have diverted attention too much from the moderate and measured use of antimony, and other drugs that are administered for the purpose of determining, as it is called, to the surface.

Diuretics, likewise, of the saline and cooling order, are occasionally administered in fever with much advantage. We do not, in the present day, talk of the concoction of urine; nor do we direct our remedial measures towards operative changes in the quality of this excretion; it ought, however, always to be recollected, that conspicuous changes in the urine, invariably accompany changes in the disorder's aspect and character.

Refrigerants are obviously called for when heat is above the natural standard. The *modus operandi* of these medicines is, in many cases, very obscure: that a little nitre, dissolved in water, should speedily bring down the heat of the whole body some degrees, is not very easy of explanation; the fact, however, would of itself be sufficient to show, that much remains to be learned on the subject of both natural and morbid temperature, before pathology can congratulate itself on much accuracy of knowledge or notion, in reference to these particulars. (See Part I. p. 21.)

PURGATIVES.

R Magnesiae sulphatis ʒvj.
 Liquoris ammoniae acetatis f. ʒss.
 Syrupi simplicis f. ʒij.
 Aquae purae f. ʒx.

Fiat haustus.

R Potassæ tartratis ʒ iss.
Syrupi aurantiorum f. ʒ ij.
Infusi sennæ f. ʒ iss.

Fiat haustus.

R Magnesiae sulphatis f. ʒ ss.
Infusi sennæ f. ʒ iss.
Tincturæ ejusdem f. ʒ j.
Syrupi aurantiorum f. ʒ iss.

Fiat haustus.

R Pulveris jalapæ gr. xv.
Sodæ sulphatis ʒ ij.

Fiat pulvis.

R Pulveris jalapæ ʒ j.
Potassæ supertartratis ʒ j.
Pulveris zingiberis ʒ ss.

Fiat pulvis.

DIAPHORETICS.

R Antimonii tartarizati gr. j.
Syrupi papaveris f. ʒ iss.
Aquæ puræ f. ʒ iiss.

Fiat mistura. Dosis pars quarta.

R Potassæ nitratis ʒ ss.
Vini antimonii tartarizati ʒ ss.
Syrupi rosæ f. ʒ ij.
Aquæ puræ f. ʒ iss.

Fiat haustus.

R Liquoris ammoniæ acetatis f. ʒ iij.
Vini antimonii tartarizati ʒ j.
Syrupi papaveris f. ʒ ij.

Fiat haustus.

DIURETICS.

R Potassæ nitratis ʒ ss.
Spiritus ætheris nitrici f. ʒj.
Misturæ camphoræ f. ʒ iss.
Syrupi simplicis f. ʒj.

Fiat haustus.

R Liquoris ammoniæ acetatis f. ʒ ss.
Spiritus ætheris nitrici f. ʒj.
Syrupi simplicis f. ʒij.
Aquæ puræ f. ʒiss.

Fiat haustus.

R Potassæ acetatis ʒj.
Syrupi simplicis f. ʒij.
Aquæ puræ f. ʒ iss.

Fiat haustus.

REFRIGERANTS.

R Potassæ nitratis ʒ ss.
Syrupi simplicis f. ʒij.
Aquæ puræ f. ʒ iss.

Fiat haustus.

R Liquoris ammoniæ acetatis f. ʒij.
Syrupi simplicis f. ʒij.
Aquæ puræ f. ʒx.

Fiat haustus.

R Potassæ supertartratis ʒvj.
Sacchari purificati ʒiv.
Corticis aurantiorum ʒ ss.
Aquæ ferventis Oijj.

Misceantur pro potu. (Imperial.)

R Potassæ subcarbonatis ℥j.

Succi limonum f. ʒ ss.

Syrupi simplicis f. ʒss.

Aquæ puræ f. ʒj.

Fiat haustus ; in statu effervescentiæ sumendus.

Indication 3d.—When obviously marked debility prevails, stimulants and cordials appear to be loudly called for. It will be found, however, that these artificial excitants are much less admissible in febrile weakness and sinking than would, *à priori*, be imagined. Some systematics have gone so far as to forbid altogether the employment of stimuli in fever; while others have pushed them through thick and thin, without regard to any other considerations than the prevailing lowness of the vital energies. Both extremes are wrong.

The propriety of stimuli seems questionable, while any of the secretions or excretions are in a manner locked up; especially when the bowels are constipated, the stomach laden, and the surface of the body in a dry unperpirable state; when the pulse, too, is sharp, as it is expressed, that is, wanting in softness and fulness, then we must be careful how we meet the weakness with exciting agents. But when the patient lies prostrate under the pressure of typhoid lowness, the bowels being loose, the skin open, and the tongue disposed to moisture, we should be losing ground by withholding supporting powers. Under these circumstances, too, opium will meet and subdue the restlessness of fever, without being attended by any injurious consequences. Dr. Currie's rule, in respect to the time and circumstances of opium's admission, will be found of importance to recollect; it may be given, he says, when the stomach is empty of food, the bowels loose, and the skin moist: and,

as above intimated, these are the conditions generally for the admission of the *excitantia* in fever; one of the most beneficial and least objectionable of which, is the subcarbonate of ammonia.

R Ammoniae subcarbonatis ℥ss.
Confectionis aromaticæ ℥j.
Aquæ puræ f. ʒ iss.

Fiat haustus.

R Liquoris ammoniæ acetatis f. ʒ iij.
Ammoniae subcarbonatis g. vj.
Misturæ camphoræ f. ʒ iss.

Fiat haustus.

R Tincturæ opii ℥ xv.
Succi limonum f. ʒ ss.
Aquæ puræ f. ʒ iss.

Fiat haustus.

The black drop may be often employed with advantage when opium is required; but of doubtful admissibility. One drop of this last is equal to four or five of the tinctura opii.

When what are called putrescent symptoms make their appearance, the mineral acids will be found occasionally of abundant service; some practitioners trust almost entirely to the use of these in those kinds of fever which tend towards the *typhus gravior* of authors.

R Acidi muriatici
— nitrici āā ℥ ij.
Syrupi simplicis f. ʒ ss.
Aquæ puræ f. ʒ iss.

Fiat haustus.

R Acidi nitrici diluti f. ʒ ij.
Syrupi aurantiorum f. ʒ ij.
Aquæ puræ f. ʒ x.

Misce pro potu communi.

R Acidi sulphurici diluti ℥ xij.

Decocti cinchonæ f. ʒ iss.

Syrupi papaveris f. ʒ ij.

Fiat haustus.

Cascarilla, valerian, serpentaria, camphora, and the æthers are in use, when the fever exhibits the typhus mitior or nervous, rather than the typhus gravior, or, as it would be said by some, putrid aspect. It is necessary to observe, that when camphor is administered with any other intention than that of a mere adjunct to other medicines, the dose ought to be much larger than can be given in the *mistura camphoræ* of the *Pharmacopœia*. It should be exhibited in doses from six to ten grains, either rubbed down with the mucilage of acacia, or in the form of bolus. Hyoseyamus is a useful medicinal in nervous fever, when sleep is required and opium is forbidden.

R Tincturæ hyoscyami f. ʒ ss.

Camphoræ gr. vj.

Mucilaginis acaciæ ʒj.

Spiritus ætheris nitrici f. ʒ j.

Syrupi simplicis f. ʒj.

Fiat haustus.

In colliquative diarrhœa, the opiate confection will be found an efficacious medicine.

R Confectionis opii gr. xv.

Aquæ cinnamomi f. ʒ iss.

Fiat haustus.

But the young practitioner must always be careful not to interfere too much with nature's operations, by precipitately checking an evacuation; which, if it takes place, while the powers of the system are yet vigorous, and is not exhaustingly profuse, may be looked upon as salutary

rather than injurious, and ought to be assisted by slight and mild mercurials; as with five grains of the pilula hydrargyri, or one grain of calomel, rather than immediately suppressed by opium and astringents.

Should hæmorrhage take place from the bowels, a considerable dose of tincture of opium, from thirty to forty minims, may be resorted to with much promise of advantage, and the Peruvian bark with sulphuric acid, and syrup of white poppy be afterwards employed according to the extent of sinking manifestation; but, even in these cases, we must be on our guard against too much of astringency.

Of the external applications which are occasionally required in the treatment of fever, very little need be said. In cases of much cerebral disturbance, leeches are often demanded for the temples; and it occasionally becomes expedient to shave the head and keep the naked scalp constantly wetted with an evaporating lotion.

R Liquoris ammoniæ acetatis f. ʒ vij.

Spiritus ætheris sulphurici f. ʒ j.

Fiat lotio.

R Ammoniæ muriatis ʒ iss.

Aquæ puræ f. ʒ viss.

Spiritus rectificati f. ʒ iss.

Fiat lotio.

Some practitioners are accustomed to apply blisters over the scalp, in the event of cerebral affection proving urgent. This, however, appears to me to be an improper practice. Blisters ought to be applied to the nucha, or legs, and not to the head; and where the vascular irritation is so high as to call for either topical or general blood-lettings, this ought always to be premised, and the blisters

not had recourse to till after the vessels have been emptied.

Whether convalescence from fever should be treated by tonics, more especially by Peruvian bark, has been made a question in modern times; indeed, it is the more common custom in the present day to leave the confirmation of health and strength entirely to time and nature. We find, however, that relapses from fever are by no means infrequent; and I am inclined to think that the departure from the "throwing in bark" practice has been too freely and fearlessly carried, to the extent of throwing it entirely on one side. It is probable, at least, that a little tonic operation upon the nervous and vascular organisation of an individual recovering from a protracted disorder may obviate the tendency to the recurrence of those actions by which the disorder was constituted. The sulphate of quinine seems well adapted to the circumstances of convalescence, as it is powerful without being bulky and nauseating.

For the treatment of the icterodes or yellow fever, I must refer to the authors who have written on the diseases of tropical climates; and shall merely confine myself to saying, that a promptness and boldness of practice is, in this disease, according to the best accredited writers, demanded, both as it respects blood-letting, and the exhibition of mercurial purges, which to practitioners in these latitudes seems almost terrific. The febrile derangement is immediately followed by a rush of inflammation upon the stomach, the intestines, the viscera, and the brain; that speedily terminates in disorganisation and death, unless met and averted by the most vigorous measures.

HECTIC.—Fever returning daily; with noon and evening exacerbations, remission in the morning, but not often complete apyrexia. For the most part, nocturnal sweats,

and the urine depositing a branny and brick-dust-like sediment.

Symptoms.—Hectic fever is prominently marked by a circumscribed red on the cheek, alternating with paleness. Its exacerbations are, as the definition states, twice in the day, the one about noon, and the other early in the evening, which last is the most marked and considerable. The tongue is clear and red; the animal powers are comparatively with other febrile states, springy and elastic; the appetite is not impaired as in fever generally; the thirst too, is by no means urgent; and the sweats, which terminate the latter paroxysm, especially are profuse, at the same time partial, being principally confined to the chest, and neck, and head.

Remarks.—Dr. Cullen has strangely violated his own principles in classing hectic irritation, under the head of general and idiopathic fever, it being almost invariably symptomatic of topical affection, and altogether of a peculiar kind and character. (See Part I. p. 85.)

Respecting its treatment, nothing need be advanced beyond what will fall to be stated under the heads of those affections, upon which it is an attendant.

AUTHORS ON FEVER, &c.

Armstrong, on Typhus, &c. *Bancroft*, on Yellow Fever. *Bateman*, on Contagious Fever. *Chutterbuck*, on the Seat of Fever. *Currie*, on Affusion of Water in Fever. *Faulkner*, on the Plague. *Fordyce's* Dissertations on Fever. *Hancock*, on Pestilence. *Jackson*, on Contagious Fevers. *Johnson (James)*, on the Influence of Tropical Climates. *Maclean*, on Contagion. *Park*, on the Pathology of Fever. *Philip (Wilson)*, on Fevers. *Tully*, on the Plague.

ORDER II. INFLAMMATION.

Synochal fever with topical inflammation and pain, the functions of the part affected being at the same time injured. The blood upon coagulation exhibiting a white crust on its surface.

GENUS VII. EXTERNAL, OR CUTANEOUS INFLAMMATION.

Pyrexia, with external redness, heat and painful tension.

Species I. Phlegmon.

A vivid red colour, a circumscribed tumor, for the most part, elevated, and tending to a point, often terminating in abscess; the accompanying pain being of a throbbing kind.

Species II. Erythema.

A ruddy colour, disappearing upon pressure, spreading unequally, with scarcely any rising of the surface; it terminates in scales, little watery pustules, or vesicles; the attendant pain is of a burning kind.

(For the circumstances connected with inflammatory action generally, see Part I. page 25.)

Remarks.—It is of much importance in practice to mark well the existence of one or other species of inflammatory action above designated, since their remedial demands and admissions are different. Their tendencies too, are different, as pointed out in the definition; the one being more generally towards suppuration, the other towards effusion or formation of watery vesicles; and, it may be added, towards gangrene, as opposed to the suppurative disposition of phlegmon. A common boil is an example of phlegmonous inflammation, as are the pustules in distinct small-pox. Scarlet fever, measles, and confluent

small-pox, more especially the first, furnish examples of erythematous inflammation. Phlegmon becomes circumscribed, and extends inwardly and outwardly from the first point of attack; erythema on the contrary, spreads itself about: the one is rather parenchymatous and muscular, the other membranous and superficial. Phlegmon, for the most part, requires and admits of more vigorous treatment, in the way of reducing measures, than does erythema; the latter will be found sometimes vincible rather by excitants than anti-excitants; at least it is often necessary to combine the two principles of repression and support, in a marked manner, when we are aiming to overcome erythematous irritation. Dr. Cullen ought perhaps to have received erysipelas as one of the subdivisions of this order.

AUTHORS ON INFLAMMATION.

Burn's Dissertation on the Blood, Inflammation, &c. *Hunter's* Treatise on the Blood, &c. *James*, on Inflammation. *Morgan*, de Puris Confectione Tentamen Medicum. *Philip (Wilson)*, on Inflammation, Fevers, &c.; and on Vital Functions. *Thompson's* Lectures on Inflammation. *Vacca*, de Inflammationis Natura, &c.

GENUS VIII. INFLAMMATION OF THE EYE.

Redness and pain in the eye, intolerance of light, and generally an effusion of tears.

Species I. Membranous.

Affecting the tunica adnata, and contiguous membranes or coats.

Species II. Tarsal.

Marked by swelling, erosion, and glutinous exudation from the eye-lids.

It would be out of place, here, to go beyond the above translation of the definitions of ophthalmia; since ophthalmic complaints are from first to last handed over to the care of the surgeon, or oculist; erroneously, perhaps so, since they are often as decidedly manifestations of internal derangements, as is inflammation of the liver or lungs. At any rate it behoves the mere medical student to investigate the pathology and peculiarities of ophthalmic disease, as a subject pregnant with much interest.

AUTHORS ON DISEASES OF THE EYE.

Brigg's Translation of Scarpa. *Edmonston*, on Ophthalmia, &c. *Guthrie's* Lectures, &c. *Saunders*, on the Disease of the Eye, &c. *Travers's* Synopsis, &c. *Veitch*, on Ophthalmia, &c. *Ware*, on Ophthalmia, &c.

GENUS IX. INFLAMMATION OF THE BRAIN.

Vehement pyrexia; pain in the head; redness of the face and eyes; intolerance of light and sound; watchfulness; delirium, either furious or typhoid.

Symptoms. — Acute pain in the head, which often commences about the occiput, and at length extends over the whole of the head; the respiration becomes, as it were, anxious; and a sense of oppression is often referred to the breast and region of the heart, while nausea of the stomach is present. The face is flushed; the eyes are full and staring; frequently the temporal and carotids are found to beat with much more than their ordinary force; the pulse generally is hard and quick; the tongue is rough and dry, and from having been at first covered with a white crust, sometimes becomes yellow or brown. When the symptoms are more insidious, and the disease has less of an idiopathic character, the symptoms are rather such as you find to characterise fevers of a typhoid tendency.

Causes. — Phrenitis acknowledges the same causes as other inflammations generally, such as rapid alternations of temperature; sometimes heat directly impinging the head from the sun's rays, constituting the insolation of authors; violent passions of the mind; immoderate application to business or study; external violence; repelled eruptions; inebriation; and a disordered state of the first passages or viscera; which last are sometimes predisposing, sometimes exciting sources, sometimes causes, and sometimes consequences of phrenitis. The inflammation is often metastatic or transferred.

Diagnosis. — Phrenitis and insanity are to be distinguished by the former being necessarily attended with pyrexia; by its more speedy termination; and by its being externally imprinted on the countenance in a way more indicative of vascular fulness. The pulse too, in phrenitis, is harder and more frequent than is ordinarily the case in mania. From the inflammation of fever, it is to be distinguished by its synchronous occurrence with the general derangement, while the phrenitic symptoms of fever present themselves after the disorder has been existent for some time. The powers in phrenitis too, are not in that oppressed state that they are in fever.

Prognosis. — Any spontaneous discharge, when it occurs free and full, is a good indication; warm and equable perspiration; natural and pretty copious diarrhœa; large flows of urine, that shall deposit a sediment; bleeding at the nose; and a return of tranquillity with consciousness, are favourable symptoms.

An unfavourable prognosis will be formed from the continued rapidity of pulsation; the continuance of delirium and watchfulness, or this last being succeeded by stupor, with a dilatation of the pupil of the eye; from the secretions continuing, in a manner, locked up, or only

breaking out partially and without relief. The fæces being white or ash-coloured; from the occurrence of *subsultus tendinum*; and from the former flushed appearance of the countenance being succeeded by collapse and sharpness of feature.

Remarks. — The student must not expect to find every case of phrenitic disorder marked by unequivocal signs; nor is it very easy sometimes to distinguish the idiopathic from the sympathetic phrenitis; the complaint, moreover, occasionally occurs in the most insidious manner; and if the difficulty of distinguishing abstract or idiopathic phrenitis, from the phrenitis consequent upon fever, should embarrass the young practitioner, let him recollect, that this difficulty is not peculiar to the inexperienced; indeed, some, as I have already had occasion to intimate, maintain that no such distinction actually exists. There is, however, in my opinion, one particular state of brain in fever, another in phrenitis, and another in mania, although the line of distinction is not always clearly traceable in clinical researches. (See Part I. p. 55. and p. 66.

Some practitioners have insisted much on the variations of external symptoms, from the circumstance of the investments, or the substance of the brain being in one or another case especially implicated; the membranous giving you marks of high excitement; the inflammation of the brains' substance being more characterised by typhoid indications; and there is some foundation for this alleged diagnosis.

Treatment. — The indications plainly are, 1st. To diminish inflammatory action generally; and, 2d, To divert the blood's impetus from the vessels of the head.

Blood-letting with more or less promptness and profusion, according to the decision and urgency of the symptoms. Oftentimes, *ad deliquium*, or you do no good. In

other cases, the detraction of ten or twelve ounces, will not only prove more safe but more lastingly beneficial. The one or the other to be repeated, *pro re natà*. The blood, especially in the former case, should be drawn *pleno rivo*, or from a large orifice.

Purgatives are immediately to succeed bleeding, and the elaterium will be found one of the most useful (see p. 152.); or give saline purges. (See p. 154.) Administer saline and diaphoretic medicines with digitalis.

R Tincturæ digitalis ℥ xv.

Liquoris ammoniæ acetatis f. ʒ ss.

Syrupi simplicis f. ʒ ij.

Aquæ puræ f. ʒ iss.

Fiat haustus quartâ quâque horâ repetendus.

R Antimonii tartarizati gr. j.

Tinctura digitalis ℥ xl.

Syrupi papaveris f. ʒ vj.

Aqæ puræ f. ʒ v.

Fiat mistura. Dosis pars sexta quartis horis.

After the vessels have been freely emptied, and the inflammatory symptoms somewhat subdued, let the diaphoretics partake a little more of the stimulant character.

R Liquoris ammoniæ acetatis f. ʒ iij.

Ammoniæ subcarbonatis gr. vj.

Syrupi croci f. ʒ ij.

Aquæ puræ f. ʒ iss.

Fiat haustus.

Admoveantur temporibus hirudines x. vel xij. ; et applicatur emplastrum cantharidis nuchæ, vel suris post venæsectionem.

Let the head be kept rather high; if it can be done without producing much irritation, let the hair be all

taken off with a razor, and to the naked scalp apply either cold-iced water in bladders, or spirits and water, or an evaporating lotion. (See p. 160.). Throughout the whole course of the complaint, it will be found of the utmost importance to keep the apartment in which the patient lies, dark and cool, to forbid the intrusion of visitors, and to countermand all animal food, excepting some broth, which may be sometimes serviceable, given under the collapse that has been produced by the necessary severity of the remedial processes.

In conclusion, I wish again to remark, that phrenitis, or at least inflammatory disorder of the brain, will often-times present itself under less characters of decision; will be mixed up with other complaints; and will prove the gradual result of erroneous or obstructed action in other and distant parts; and, in these cases, the treatment will require to be assiduously directed to these primary and constitutional conditions. On the other hand, it is to be recollected, that these supposed primary are not seldom the actually secondary states; and that a bad condition of the encephalon will produce disordered viscera, with as much or more readiness than disordered viscera will bring on the brain affection. (See under *Hydrocephalus*.)

GENUS X. CYNANCHIAL DISORDER.

Pyrexia, more generally of the high, but sometimes of the low typhoid kind; redness and pain in the fauces; deglutition and breathing difficult, with a sense of tightness in the fauces.

Species I. Inflammatory Sore Throat or Quinsey.

Affecting the mucous membrane of the fauces, and chiefly the tonsils with swelling and redness; the attendant fever being synochal.

Species II. Malignant or, as it is commonly termed, Putrid Sore Throat.

Affecting also the tonsils and membrane of the fauces. with swelling and redness, attended, moreover, with whitish or ash-coloured and spreading crusts, covering ulcerations; the accompanying fever being typhoid and exanthematous.

Species III. Tracheal Inflammation. (Croup).

Cynanche, difficult breathing; sonorous inspiration; hoarse voice; and trumpety-sounding cough, without much faucial swelling, and with little interruption of swallowing; the fever synochal.

Species IV. Pharyngeal Inflammation.

Marked by redness at the lower part of the fauces, with difficult and painful deglutition; the respiration not much interfered with; the fever a synocha.

Species V. Parotid Inflammation. (Mumps).

Considerable tumour in the parotid and submaxillary glands; neither respiration nor deglutition much implicated; the connected fever synochal, but for the most part mild.

Symptoms of Quinsey or inflammatory Sore Throat.—Rigors succeeded by heat; difficulty of swallowing and breathing, with hoarseness of the voice; and, as the disease advances, indistinct articulation; much secretion of saliva and mucus; the tongue and checks become swollen; the eyes are red; deafness takes place; and, upon inspecting the fauces and throat, not only the tonsil glands, but all the adjacent parts will be found to partake of the disordered action.

Causes. — Those of inflammation generally: putting on

damp linen; sitting in currents of air, or in damp places; getting wet in the feet; suppressed evacuations; violent exertion of the voice; acrid substances irritating the fauces; small dose of contagion not sufficient to have created fever; habit, being very liable to return from slight excitants.

Diagnosis. — From the malignant sore throat (*Cynanche Maligna*), by the phlegmonic character of the inflammation; the tendency being rather to purulent formation than to small ulcerations; and by the sympathetic fever being rather synochal than typhoid.

Prognosis. — Favourable. While the disorder, indeed, continues to be merely inflammatory quinsey, there is very little danger, for although the affection often threatens suffocation, that termination seldom or never occurs. Favourable cases terminate about the fifth day, with copious salivation or moderate diarrhœa. The purulent matter is sometimes discharged by the mouth, at other times the patient is only conscious of its exit by the freedom the discharge gives from urgent symptoms. When the prognosis is to be unfavourable, the disorder runs into the erythmatic and malignant kind.

Treatment. — Emetics at the outset.

R Antimonii tartarizati gr. ij.

Vini ipecacuanhæ f. ʒj.

Aquæ puræ f. ʒiij.

Fiat mistura; sumat æger partem quartam bis in horas donec vomat.

The inflammation being established.

Admoveantur hirudines, sex vel octo pone auribus, et postea applicetur emplastrum cantharidis nuchæ.

Saline purgatives and diaphoretics are usually required, (see under the head *Inflammatory Fever*); but general

blood-letting, unless the patient be of a high sthenic diathesis, is not often demanded.

The inflammation being a little got under, let gargles be used.

R \acute{a} Acidi muriatici f. \mathfrak{z} ss.

Syrupi papaveris f. \mathfrak{z} ij.

Infusi rosæ f. \mathfrak{z} vj.

Fiat gargarisma.

In order to assist suppuration, it will be sometimes found expedient to apply emollient poultices to the side or sides of the neck, and, especially when suffocative feelings are urgent, the lancet may be plunged into the inflamed tonsil, even should the suppurative process be not complete. Let the patient inhale the steam of warm water from Mudge's instrument, and it will be an improvement to mix an ounce of tincture of opium in half a pint of the water employed for inhalation. Camphor and æther are recommended for the same purpose, but in the general way these last will be found too stimulating.

During convalescence it may be expedient to give small doses of Peruvian bark and sulphuric acid, in order to contract the relaxed vessels, and by giving general tone to prevent the disorder's recurrence.

R \acute{a} Acidi sulphurici diluti \mathfrak{m} xv.

Decocti cinchonæ f. \mathfrak{z} iss.

Syrupi papaveris f. \mathfrak{z} j.

Fiat haustus ; ter in die capiendus.

For an account of the malignant sore throat, see *Scarlatina Cynanchica*.

Symptoms of Croup, (Cynanche Trachealis). — Croup is sometimes sudden in its attack ; at other times it comes

on gradually and insidiously, being preceded during several days by common symptoms of catarrh: when it is established, the difficulty of breathing is such as to excite great distress; when efforts are made to speak, or when coughing occurs, and indeed during common inspiration and expiration, the stridulous noise that is produced is quite peculiar. The attendant cough is usually hard and dry in the first instance, and the distress of the little patient seems mainly referrible to the wheezing; afterwards, however, a viscid matter is secreted, and the consequent efforts to expectorate threaten suffocation. The disorder sometimes destroys life in less than forty-eight hours from its commencement; at other times it runs on to the fourth, fifth, or sixth day, and then terminates fatally. It is a disease of childhood, seldom occurring after the time of the second dentition.

Causes. — It is brought on by the common sources of inflammation in children predisposed to the disease; predisposition consisting in a plethoric habit, with robust stamina. The irritation from teething seems a fruitful source of the disease. A disordered state of the first passages may likewise prove as well an exciting as a predisposing cause of croup. Some peculiarity in the atmosphere, at times, tends to bring it on, as it occasionally shows itself both epidemic and endemic. Damp low situations, at least, predispose to it. It has a tendency to return by habit. In some cases it would appear to be contagious.

Diagnosis. — The peculiar noise in breathing, coughing, and speaking, is the great characteristic feature of croup. It is further distinguishable from spasmodic asthma by being without intermission; and by the accompanying irritation being more decidedly febrile, with hard pulse, high-coloured urine, &c.

Prognosis. — When the expectoration shortly becomes free and relieves the patient, and there is a decline of the febrile symptoms, we may expect a favourable termination. When no expectoration takes place, and the voice increases in acuteness, without the sympathetic fever giving way, we must expect an unfortunate termination. It is a disease of the highest danger.

Treatment requires to be prompt and decided. In the first instance, before the complaint shall have been fully formed, administer an emetic; as, in the following formula, supposing the child to be from two to four years old.

R Vini ipecacuanhæ f. ʒ ss.
 Antimonii tartarizati gr. j.
 Aquæ puræ f. ʒ ss.

Fiat mistura; cujus cochleare minimum subinde dandum donec excitetur vomitio.

R Oxymellis scillæ.
 Vini ipecacuanhæ āā f ʒ ss.

Fiat mistura ad vomitum promovendum. Dosis cochleare unum minimum, subinde.

When the disease shall be found decidedly marked and fully established, the calomel treatment will prove the safest resort.

R Hydrargyri submuriatis gr. ij.
 Pulveris sacchari albi gr. iij.

Fiat pulvis. Secundis horis sumendus.

In cases of high excitement and considerable plethora, bleeding by leeches, or opening the jugular vein, may accompany the calomel plan; but in instances of less vigour, much bleeding is of doubtful propriety; and, at any rate,

no time should be permitted to elapse before the commencement of treatment by calomel, which must be continued till the inflammatory symptoms and difficult respiration abate.

Some practitioners are stated to be exceedingly successful in the exclusive employment of tartar emetic, so as to keep up a constant nausea till the force of the disease gives way.

An external application of tartar emetic to the chest, so as speedily to produce eruptions, will often prove highly useful.

R Antimonii tartarizati.

Opii pulveris āā ʒj.

Cerati cetacei ʒij.

Fiat unguentum ; cujus applicetur thoraci pars sexta, viâ frictionis, sexta quâque horâ.

The opium is serviceable in checking the tendency to laryngeal spasm ; when blisters are used, they should be applied to the nucha or chest, rather than around the throat.

Warm bathing may be had recourse to with advantage, when the plethoric state is not such as to render its propriety doubtful.

Laryngotomy?

Pharyngeal and Laryngeal Inflammation. — Pharyngeal inflammation sometimes takes place of an erythematic kind, without involving the tonsils in any other way than as these constitute a portion of the cavity implicated ; it is attended with somewhat of difficulty in deglutition, but not of impeded respiration, unless the inflammation extend itself from the pharynx into the larynx, and then the laryngitis of modern authors comes to be formed,

which is a disorder often of much danger, and requires a speedy recognition and treatment.

Symptoms of Laryngeal Inflammation. (*Cynanche Laryngæa*, or *Laryngitis*). — Pyrexial signs first make their appearance, followed by difficult and painful breathing, with much hoarseness, and a considerable sense of suffocation; there is also impeded deglutition, and, upon examination of the pharynx, a dusky erythematic redness is perceived throughout a considerable portion of its cavity.

Causes. — Sudden alternations of temperature constitute the principal excitant of laryngitis. It is sometimes produced by violent exercise of the voice, and a degree of it may, at times, result from sympathetic irritation. Inflammations of this part having been present, leave the patient particularly obnoxious to returns of disorder in the laryngeal and tracheal tubes from slight causes.

Diagnosis. — Laryngitis has been confounded with croup, but the latter disorder is without painful deglutition or affection of the fauces; the hoarseness, too, of cynanche laryngæa is different from the stridulous sound of cynanche trachealis, and it is a disease more of advanced life than early infancy. From pulmonary disorder the laryngeal inflammation is distinguishable by its affecting the patient with hoarseness, as well as difficulty of breathing, and by this impeded respiration being more confined in its manifestation to the upper portion of the air passage. From asthma it is to be distinguished by the circumstance just mentioned, and the presence of pyrexial irritation, and by the complaint not being marked with such complete intermission as is the case with asthmatic disorder.

Prognosis. — Unfavourable when the inflammation is at the same time high and erythematic. When it is of a more phlegmonous cast, it often suppurates, continues for a long period, and at length terminates existence.

Treatment.— Blood-letting, local and general, according to the strength of the patient, and the degree as well as kind of disorder. Blisters, or antimonial friction of the chest, (see page 175.) Inhalation of warm water and tincture of opium, (see page 172.) Saline, and diaphoretic, and purgative medicinals, (see page 155.) Laryngotomy where suffocation is menaced.

Remarks.— Laryngeal disorder, when fatal, is often confounded with phthisis. It behoves the practitioner to be early in his curative means; for, unless nipped in the bud, this affection becomes one of the most obstinate and dangerous in the whole catalogue of complaints; it is, likewise, of easy and insidious production.

Symptoms of Mumps. (*Cynanche Parotidea.*)— After slight pyrexia, a swelling takes place under the angle of the lower jaw, and extends itself upwards behind the ear, and forwards upon the submaxillary gland: the swelling increases generally till the fourth day, and then declines. It is usually so mild in respect of the sympathetic irritation, as not to require any treatment beyond a dose or two of some common aperient medicine. Occasionally, however, the swelling takes on a more decidedly inflammatory character, and terminates in suppuration. At other times, delirium follows the retrocession of the swelling, by a sort of metastasis to the brain. Still more commonly the testis in the male, and the breast in the female, become the seats of the transferred disorder.

Causes.— It sometimes arises from the common sources of inflammation; at other times it seems dependent upon a particular condition of the atmosphere; and often may be traced clearly to specific contagion.

Treatment.— When metastasis takes place, it is necessary to pay attention to the secondary disorder, to purge the patient freely, and apply warm fomentations to the

parts newly affected. When, indeed, the inflammation runs high in the testicle, cooling and discutient applications will be demanded, and occasionally venæsection and leeches.

GENUS XI. PNEUMONIC INFLAMMATION.

Pyrexia, pain in some part of the thorax, with difficult respiration, and cough.

Species I. Peripneumony.

The pulse not always hard but sometimes soft; obtuse pain in the chest, respiration constantly difficult, and often impossible, unless the body be in an erect posture; the face being of a purple colour, and swollen; the attendant cough is usually moist, and oftentimes blood is expectorated.

Species II. Pleurisy.

Hard pulse; the pain of the side for the most part pungent, and especially increased by inspiration; difficulty of lying on the side; exceedingly painful cough, at first dry, afterwards moist, the expectoration being often bloody.

Symptoms of Peripneumony, or Inflammation of the Lungs.—Pyrexial irritation takes place, accompanied by pain, somewhat obtuse, in a part of the thorax; the pulse is more or less quick and hard, according to the violence and extent of the local disorder; the cough increases the pain, and, throughout the disorder, respiration is attended with some difficulty; at first, the expectoration is difficult and painful, but in the course of four or five days, sooner or later, it becomes free, and the oppressed breathing is also much mitigated; the pulse, likewise, becomes more open and less quick, and the symptoms of disorder go off.

When the inflammation, instead of thus declining, goes on to suppurate, rigors are felt by the patient, the pulse

becomes more bounding, and does not decrease in frequency, the respiration more oppressed but less painful, and the patient is able to lie on the affected side only.

Symptoms of Pleurisy or Inflammation of the Pleura. — When the pleura, rather than the substance of the lungs, is inflamed, the pyrexial irritation is often more strongly marked; the topical pain is sharper; and the breathing much more straitened and difficult, the patient crying out with distress when desired to take a full inspiration. The pulse is generally harder, and more vibratory than in peripneumony; there is from the first, too, a considerable increase of pain by turning the body from side to side.

Causes of Pneumonic Inflammation. — Vicissitude of temperature; violent bodily exercise, or inordinate exertion of the lungs; obstructed, or suppressed perspiration; and sometimes a constipated bowel, will not only predispose to the affection, but will prove its actual excitant.

Diagnosis. — It is sometimes difficult to ascertain whether the inflammation be in the lungs, or upon the liver; often, indeed, both organs are simultaneously engaged with the disorder. The distinction, however, is to be taken from pressure upon the region of the liver not so manifestly increasing pain when the disease is not hepatic; by the absence in pneumonic inflammation of that sallowness of countenance and oppression of spirits that are so characteristic of hepatic disorder; by the difficulty in pneumonia of lying on the side affected, while the reverse is usually the case in hepatitis; by the absence in pneumonia of shoulder pain; and by the cough being coeval with the other symptoms of disorder; while in hepatitis it more generally succeeds to, than is a primary accompaniment of the inflammation.

Pneumonia is to be distinguished from muscular or spasmodic pain of the chest, by its accompanying pyrexia;

by its being more decided and continued; and by the attendant cough.

Prognosis.—Pulmonic inflammation may be expected to terminate favourably when mucous expectoration occurs freely within two or three days from the attack; and if this expectorated matter is tinged with blood, no unfavourable inference should thence be drawn. Warm and equable perspiration; a deposit of sediment in the urine; spontaneous discharges, as epistaxis or diarrhœa, are favourable circumstances.

The unfavourable ones are rigors, supervening upon the continued inflammation; delirium taking place; the perspiration, instead of being free and warm, cold and partial; a purple appearance of the countenance, or a collapse of feature; with an increase in the difficulty of breathing, while the expectoration ceases altogether, or becomes inordinately copious, and purulent or sanious.

Remarks.—Inflammation within the chest may especially affect the pleura, when we have the symptoms marked in the definition of pleuritis, or it may particularly engage the parenchyma of the lungs, when peripneumony becomes formed, or it may more directly implicate the mucous lining of the bronchial cells; and in this last case the bastard peripneumony (*peripneumonia notha*) of Cullen and other systematics is present, which is the bronchitis of Badham, Hastings, and other modern writers.

In bronchitis the pain is less acute than even in peripneumony, much less so than in pleurisy, the pyrexial irritation is often not so high, and the pulse is rather oppressed than hard or vibratory; from the first, too, the mucous expectoration is copious: indeed, bronchitis is nothing more nor less than catarrhal irritation protracted, become more severe and extended further down into the air cells of the lungs.

There is another species of bastard peripneumony, which is constituted of a congested, rather than inflammatory condition of the pulmonary organs, and which is, likewise, marked rather by suffocative feelings and impeded respiration, than by great pain or straitened breathing. Let the student, however, always recollect, that these different grades and species of pulmonary affection run constantly into each other, so as to defy nosological distinctions, and that systematics are too apt to define, and describe, and distinguish with gratuitous freedom.

Treatment.—Venæsection, with more or less copiousness, according to the urgency of the pain and dyspnœa.

Mitte sanguinis ℥ xvj. ex brachio, pleno rivo, et pro re natâ repetatur venæsectio.

Applicetur post venæsectionem emplastrum cantharidis magnum sterno.

Should strangury follow the blister, let the patient drink freely of decoctum hordei, with gum acacia dissolved in it.

Administer brisk purges of the saline kind, if the pyrexial excitement be high, and there are no indications present of visceral obstruction; but if there are such marks of obstructed viscera, let the saline purges be preceded by calomel.

R Hydrargyri submuriatis gr. v.

Confectionis aromaticæ q. s.

Fiat pilula; quamprimum sumenda superbibendo haustum sequentem.

R Magnesiæ sulphatis ℥ j.

Syrupi aurantiorum f. ℥ ij.

Aquæ puræ f. ℥ iss.

Fiat haustus.

Immediately after the blood-vessels have been emptied, and the bowels freely acted on, I often confine myself to the administration of one grain of calomel, and one of opium, every sixth hour.

Give nauseating doses of antimonials, so as to keep up a feeling of sickness without the production of actual vomiting. This practice some have proposed exclusively, as preferable to either blood-letting or purging.

Administer sedatives, in order to subdue inflammation and allay cough.

℞ Tincturæ digitalis ℥ x.
 ——— hyoscyami ℥ xxv.
 Liquoris ammoniæ acetatis f. ʒ iij.
 Syrupi simplicis f. ʒ ij.
 Aquæ puræ f. ʒ iss.

Fiat haustus.

When the inflammatory action is evidently lessened, and a disposition is manifested towards expectoration, let expectorant medicinals be conjoined with refrigerants, diaphoretics, and anodynes.

℞ Vini ipecacuanhæ ℥ xxv.
 Syrupi papaveris f. ʒ j.
 Pulveris potassæ nitratis ʒ ss.
 Syrupi tolutani f ʒ iij.
 Aquæ puræ f. ʒ iss.

Fiat haustus.

Expectorants are still more applicable when the irritation seems principally to direct itself to the bronchial membrane; and in equivocal or bastard peripneumony, with much tendency to sinking in the vital powers, the subcarbonate of ammonia may be usefully administered in combination with expectorants.

℞ Ammoniæ subcarbonatis g. viij.
 Mucilaginis acaciæ f. ʒ iij.
 Vini ipecacuanhæ ℥ xv.
 Tincturæ scillæ ℥ xij.
 Syrupi papaveris f. ʒ j.
 Aquæ puræ f. ʒ iss.

Fiat haustus.

Convalescence may be assisted by small doses of cascarilla.

℞ Oxymellis scillæ.
 Syrupi papaveris āā f. ʒ j.
 Infusi cascarillæ f. ʒ iss.

Fiat haustus.

Pulmonary inflammation terminates in effusion, constituting one species of hydrothorax; or in general suppuration, forming the empyema of Cullen, and other authors; or in partial and confined suppurations, named vomica; or in the pouring out of a muco-purulent fluid, either into the cavity of the thorax or cellular substance of the lungs: or the termination may be in a congested and semi-hæmorrhagic state of the pulmonary capillaries; or, lastly, into large adhesions, between the layers of the pleura binding down this membrane to the substance of the lungs, on the one hand, or to the parietes of the chest, on the other. Indeed pleuritic inflammation seldom exists for any length of time, or is carried to any great extent, without occasioning these membranous adhesions; whence results the impeded respiration which so commonly follows upon pleuritis, even when the disease has been considered to terminate favourably.

Vomica. — After pneumonia that has not terminated in resolution, dyspnœa and cough continuing, with difficulty

of lying on the side opposite to that affected, and with hectic fever.

Empyema.—After pneumonia that has terminated in suppuration, often after vomica, a remission of pain, while dyspnœa and cough continue; difficulty of lying down; hectic fever; and frequently a sense of fluctuation in the chest, with symptoms of hydrothorax.

Nothing can be done, in these cases, beyond supporting the patient's strength with nutritive diet, and exhibiting anodynes, expectorant and tonic medicinals, as occasion may require. When the fluctuation of matter is distinctly perceptible exteriorly, paracentesis may be performed for its evacuation; but, in the general way, both pulmonary disorganisation and systematic disorder have advanced too far to admit of permanent relief by this measure.

GENUS XII. INFLAMMATION OF THE HEART. (*Carditis.*)

Pyrexia; pain in the region of the heart; anxiety; difficult breathing; unequal pulse; palpitation; fainting.

When pulmonic inflammation is directed to, and implicates decidedly, either the investing membrane or substance of the heart, prompt measures are more especially demanded; they are the same, however, as in pneumonia generally, only that they require to be pursued with more fearless vigour.

GENUS XIII. INFLAMMATION OF THE PERITONÆUM.

(*Peritonitis.*)

Pyrexia; pain in the abdomen, increased by an erect posture, without the peculiar signs of other abdominal inflammations.

As the abdominal viscera are, for the most part, invested with a peritonæal covering, an inflamed peritonæum of the

particular viscus gives a peculiar character to the affection; sometimes, however, a great part of the peritonæal membrane shall become the subject of inflammation, bringing with it a corresponding pain, and pyrexial irritation, without the immediate induction of any other visceral disease. Than pure peritonitis, there is, indeed, scarcely any affection more common, or more important for the practitioner to recognise. Its treatment, when it is of the active kind, is of the same as that of active inflammation generally; and when of a more passive, insidious, or chronic nature, small doses of calomel and opium, and fox-glove, combined and varied according to circumstances, will be found useful. The great objects of the practitioner in peritonæal inflammation will be to obviate the tendency to dropsical effusion, when the irritation is of a more spreading or erythematic cast; and to prevent adhesive conjunctions of a preternatural kind, when the character of the disorder is rather phlegmonic, and tending to the effusion of coagulable lymph.

GENUS XIV. INFLAMMATION OF THE STOMACH.

(*Gastritis.*)

Typhoid pyrexia; anxiety; heat and pain in the epigastrium, increased by taking any thing into the stomach; an inclination to vomit; and immediate rejection of the ingesta; hiccup.

Symptoms. — Gastric inflammation brings with it extreme depression of spirits, and prostration of strength; the pulse is often very small, at the same time that it is rapid and contracted. Urgent thirst prevails, and the pain is sometimes increased by pressure upon the region of the stomach. The tendency of the disease is often towards gangrene, unless resolution be early accomplished;

and if gangrene occur, although the heat and pain remit, the pulse increases in rapidity, hiccup and coldness of the extremities succeed, and life is soon terminated.

Remarks. — Gastric inflammation of an acute and phlegmonous kind, is of much less frequent occurrence than might *à priori* be supposed. It has been observed, that in collections of morbid preparations, there are fewer instances of disorganisation from this cause, than from almost any other; the diseased appearances of the stomach that are met with being, for the most part, either those of slow and chronic inflammation, or irritation of a specific nature, as of schirrus, affecting either the pyloric or cardiac orifice of the organ.

Causes. — Acrid or indigestible substances taken into the stomach; alternations of temperature; draught of cold water, while the body is hot; suddenly repelled eruptions, and metastasis, especially of gout.

Diagnosis. — From spasm by the pyrexial symptoms, and burning heat; from enteritis by the seat of the pain; also by the burning sensation, vomiting, and tendency to hiccup, even before the gangrenous termination, which in enteritis is a mark of gangrene having commenced.

Prognosis. — If, in the course of two or three days, the pain and sickness cease, while the pulse becomes more free or full, and diminishes in frequency, the urine depositing a sediment, and the bowels becoming spontaneously loose, a favourable termination may be expected. The unfavourable symptoms are a continuance of disease for several days, the pulse increasing in frequency, and hiccup remaining in spite of the medicinal processes.

Treatment. — General blood-lettings, and the free application of leeches to the epigastric region; afterwards warm fomentations, and a blister, the copious employment

of mucilaginous diluents, such as linseed tea, good barley water, with gum acacia dissolved in it. Emollient anodyne clysters are likewise to be injected.

R Tincturæ opii f ʒ ss.

Mucilaginis amyli.

Aquæ puræ āā f ʒvi.

Fiat enema.

Or these may be more purgative.

R Olei ricini f ʒiij.

Decocti hordei f ʒv.

Fiat enema.

Endeavour to allay irritation by the exhibition of the following draught.

R Potassæ subcarbonatis ʒj.

Succi limonis f ʒ ss.

Tincturæ opii mʒj.

Aquæ puræ f ʒ ss.

Fiat haustus.

Pills with a grain of calomel, and a grain of opium, administered three or four times in the course of the day, will be found sometimes to allay pain, and arrest inflammatory action.

The erythematie inflammation which is often consequent upon a long habit of intemperance, especially in the use of spirituous liquors, is, for the most part, best met in the way of medicine, by very small doses of mercurials joined with one or more of the vegetable narcotics.

R Pilulæ Hydrargyri.

Extracti Hyoseyami

———— Conii āā gr. ij.

Fiant pilulæ duæ, nocte maneque sumendæ.

When the irritation is of that nature which leads to schirrus of the pylorus or the cardia, the above combination of medicinals will be found useful in allaying pains, and thus mitigating the sufferings of the patient.

GENUS XV. INFLAMMATION OF THE BOWELS. (*Enteritis.*)

Typhoid pyrexia; pungent pain in the abdomen, extending itself and twisting about the umbilicus; vomiting; the bowels obstinately constipated.

Species I. Phlegmonous.

With acute pains, vehement pyrexia, vomiting, and constipation.

Species II. Erythematic.

With slighter pain and pyrexia; without vomiting; and attended by diarrhœa.

Symptoms. — The pain in enteritis most usually commences at the cœcal head of the colon; it is increased by pressure: the pulse is very small, contracted, and frequent; there is great prostration of strength, and much anxiety; the abdomen becomes eventually tense; and vomiting of bilious matter takes place.

Causes. — Atmospherical vicissitudes; exposure of part of the body to cold; getting wet in the feet; spasms of the bowels; and strangulated hernia. Very often inflammation is actually induced by a constipated bowel; sometimes this is only a predisposing and assisting cause.

Diagnosis. — From colic, by the presence of pyrexia, and the increase of pain upon pressure; from gallstones (see Icterus); from nephritis (see Nephritis); from gastritis (see Gastritis).

Prognosis. — The constipation giving way; the pulse becoming fuller and less frequent; the pain changing its seat;

the abdomen becoming less tender and tense; equal, warm, and free perspiration, with sediment in the urine, are favourable tokens. The unfavourable ones are rigors, which are not very common in enteritis; sudden cessation of pain, while the pulse increases in frequency; hiccup; cold extremities; clammy and partial perspirations; and an increased tension of the abdomen.

Remarks. — Inflammation of the bowels varies most exceedingly in grade, in kind, and in locality. Sometimes the villous coat will be affected with erythema, and diarrhœa will be produced; at other times the inflammation will be directed more towards the peritonæal investments of the intestines; and often the muscular fibres are the principal parts engaged with the disease from which those tormina and twistings that are put down in the definition arise. Then in respect of degree; the practitioner will, occasionally, be uncertain whether absolute inflammation be present; while, at other times, the symptoms are as unequivocal as in any affection that is designated by nosological character.

The mode of termination is a good deal regulated by the seat and sort of inflammation. Decidedly marked enteritis, unless checked, tends with frightful rapidity towards gangrene; while the more fixed, but less violent disorder, eventually comes to produce little points of ulceration, and tabid wasting. In this, as in all other cases the student is rather to be directed in his pathology and practice by attentive observation and reflection for himself, than by the distinctions and divisions of nosology.

Treatment. — Emptying the blood-vessels, and removing that obstruction which has caused, or which keeps up the inflammation, are the two great indications of practice. The bleeding is often required to be copious, and the blood should be drawn promptly from a large orifice.

Apply leeches and warm fomentations to the bowels. Rub the abdomen all over with castor oil; inject purgative enemas.

R Magnesiæ sulphatis f. $\frac{3}{4}$ iss.

Olei ricini f. $\frac{3}{4}$ j.

Aquæ bullientis f. $\frac{3}{4}$ x.

Fiat enema.

It being desirable to procure evacuations by the bowels, as speedily as possible, we must administer purgatives also by the mouth; and the following form is the most likely to be retained.

R Hydrargyri submuriatis $\frac{3}{4}$ j.

Extracti colocynthidis compositi $\frac{3}{4}$ j.

Fiant pilulæ xvi.; quarum sumat æger duas secundâ quâque horâ donec soluta sit alvus.

At times, however, the pain and irritation are so exceedingly urgent, that opium is demanded after blood-letting, in spite of the constipated state of bowel. Calomel and opium, of each a grain, will often be found highly useful, while enemas are injected; and the abdomen freely fomented with hot water, and rubbed with castor oil.

The application to the rectum, of three or four drops of croton oil in the way of suppository, will sometimes procure evacuations more readily and freely, than enemata.

In cases of invincible sickness, with every appearance of intus-susceptive obstruction, from four to six ounces of running quicksilver may be poured down the mouth.

The above directions, of course, apply to the more positive and virulent forms of the disease; the less decided, more insidious, more chronic, and more specific inflamma-

tions demand a discriminating adaptation to varying circumstances.

GENUS XVI. INFLAMMATION OF THE LIVER. (*Hepatitis*.)

Pyrexia; tension, and pain in the right hypochondrium, sometimes pungent as in pleurisy, but oftener dull; pain extending to the clavicle, and to the tip of the right shoulder; difficulty in lying on the left side; dyspnoea; dry cough; vomiting; alacur.

Inflammation of the liver is acute or chronic, the first being marked by the above-mentioned signs. The second often not attended by any unequivocal therapeutics; but which is to be suspected, by the patient having been the subject of an affection of long the liver; by there being a sense of weight or fulness in the right hypochondrium, with a dull or aching pain of more or less pungency; by the existence of tenderness on the right hypochondrium, or on lying on the left side; and lastly by slight pyrexia, and the frequent occurrence of the above-mentioned symptoms.

Symptoms.—Very little can be added to these definitions; it may, however, be remarked, that the pain varies very much, both in itself, and its sympathetic consequences, as soon as another part of the liver is affected; the state of the bowels is irregular; sometimes a diarrhoea will be produced by the increased secretion and acrimonious condition of the bile; at other times, the inflammation will arrest, or very nearly so, the secretion altogether, and then, of course, there are clay-coloured fæces, and sluggish bowels; a yellowish tinge in the eye is not at all uncommon in hepatitis; the urine is high-coloured, and the spirits are for the most part dull and oppressed; the pulse is sometimes intermittent in chronic hepatitis; stomach

derangements become conspicuous; and there is often a tendency to œdematous swellings about the ancles.

Causes. — Those of inflammation generally; immoderate use of spirituous liquors; mental affections; autumnal heats and colds giving an acrimony to the bile; cessation of the menstrual flux, which is sometimes cause, and sometimes consequence, of the disorder in the liver; protracted intermittents; sitting day after day in one position; tight lacing of stays; in a word, whatever disturbs the free circulation through this important and complicated organ.

Diagnosis. — From pneumonic inflammation, (see Pneumonia); from gastritis, by the seats of the pain, and the absence of burning sensation upon any thing being taken into the stomach; by the strength not being so suddenly pulled down as in gastritis, nor the pulse so small and oppressed.

Prognosis. — Favourable when the pyrexial symptoms subside, the complexion loses its sallowness, and spontaneous evacuations, as of the hæmorrhoidal occur; when perspiration becomes general and warm; when the urine deposits a sediment, or when local inflammation takes place in some part of the body's surface.

Unfavourable — when fever continues and becomes attended with rigors; the pain having remitted, and being followed by a sense of fulness, and perception of throbbing; or in the more chronic, and in this country more common form, the organ becoming hard to the feel; the yellow tinge of the countenance refusing to give way; and abdominal swelling with fluctuation presenting itself.

Terminations. — In suppuration, the pus pointing outwardly, and being discharged externally; or making its way into or through the lungs; or penetrating into the abdominal cavity; or pushing through the ducts of the liver into the intestines; or getting into the stomach or

colon, in consequence of adhesions of the inflamed liver to these last viscera. Schirrous hardness, with enlargement, is a very general consequence of inflammation in the liver; tubercles of all forms and sizes are found in its substance; extensive adhesions take place with neighbouring viscera, and parts; vesicular cysts and hydatids become developed; unnatural softness, with enlargement, sometimes takes place. In fine, there is scarcely any modification of disordered structure, that the liver does not occasionally display upon dissection, and this with such a capricious irregularity as to defy *à priori* judgment.

Treatment.—General and local blood-letting according to the urgency of the topical disorder and strength of the patient's system. After evacuations of blood, blisters and cathartics, as in other cases of inflammatory disorders. Mercurial cathartics are, in general, preferred in inflammation of the liver, even of the active kind. After purging and bleeding, calomel and opium, as in other visceral inflammations; when suppuration manifests itself, and appears to point externally, let it be encouraged by warm fomentations and poultices. Suppuration being fully established, and the abscess having discharged itself, or been opened, let bark and a generous diet take the place of antiphlogistic measures. In chronic hepatitis, the treatment is to be more of the deobstruent and stimulant kind; such plans being adopted as in some measure emulge the biliary organ from its load, or excite it into new actions. Topical bleedings, however, with leeches, or by cupping-glasses will be found occasionally requisite. Small doses of mercury are in these cases often abundantly serviceable.

R Hydrargyri submuriatis gr. j.

Extracti conii

—— hyoscyami āā gr. ij.

Fiat pilula; nocte maneque sumenda.

R Unguenti hydrargyri fortioris ℥j.

Camphoræ gr. v.

Fiat unguentum ; applicetur omni nocte vel alternis noctibus in regionem hepatis.

In some instances benefit will be found by the use of antimonial ointment over the region of the liver, so as to bring out upon its surface phlegmonous eruptions.

R Antimonii tartarizati

Opii pulveris āā ℥ss.

Cerati cetacei ℥ij.

Fiat unguentum ; pars sexta omni nocte utenda fricatione.

Let saline purgatives be given, in combination with bitters and deobstruents.

R Magnesiae sulphatis ℥ iss.

Extracti taraxaci ℥j.

Infusi quassiae f ℥ iss.

Tincturæ cardamomi compositæ f ℥j.

Fiat haustus ; ter in die capiendus.

It is often of service to promote the urinary discharge.

R Juniperi baccarum ℥ iv.

Aquæ bullientis Oj.

Fiat infusum.

R Liquoris hujus colatæ f ℥ iss.

Extracti taraxaci ℥j.

Spiritus ætheris nitrici ℥j.

Fiat haustus ; ter in die sumendus.

R Sodæ subcarbonatis exsiccatae.

Saponis duri āā ʒj.

Pulveris rhæi ʒj.

Olei juniperi ℥ xxv.

Mucilaginis acaciæ, q.s.

Fiat massa ; in pilulas xxx. dividenda ; sumat tres nocte maneque.

In chronic hepatitis, nitric acid has occasionally been employed with alleged advantage.

R Acidi nitrici diluti ℥ x.

Syrupi simplicis f ʒ iij.

Aquæ puræ f ʒ iss.

Fiat haustus ; ter in die sumendus.

And both the external and internal employment of chlorine have been recently recommended ; the former constituting the aqua regia, the mode of preparing and employing which, I shall take the liberty of extracting from Dr. Good's study of medicine.

“ The aqua regia should be compounded of three parts, in measure, of muriatic acid, and two of nitric acid ; and, in preparing them for use, a pint of the combined acid is to be mixed with the same measure of water. This constitutes the diluted acid, or diluted aqua regia. The acid bath is to consist of three ounces of this diluted acid to every gallon of water. It should, however, be observed by those who are inclined to form this mixture extemporaneously at their own houses, that if either of the acids be poured immediately on the other, a large volume of very offensive gas will be disengaged, on which account it will be better to pour them separately and slowly on their proper measure of water.

“ If the acids be of adequate strength, the mixture subdiluted for bathing will, to the taste, have the sourness of vinegar, and perhaps prick the skin slightly if very deli-

cate, but not otherwise after it has been applied to the skin half an hour. But since these acids vary much in their degree of concentration, as distilled by different chemists, there will be some variation in their power. The strength of the bath, however, should not be much greater at any time than the proportion here laid down; for otherwise it may excite a troublesome rash, and give a yellow hue to the nails and skin on the feet, or whatever other part is exposed to its action. A narrow tub for a knee-bath, just wide enough to hold the feet and reach the knees, should contain three gallons of the prepared bath liquor, and consequently about nine ounces, in measure, of the diluted aqua regia. For a foot-bath, half a gallon may be sufficient, and a common wash-hand basin may be employed as a vessel for the purpose. The feet should remain in the bath for twenty minutes or half an hour; and the legs, thighs, and abdomen be in the mean time frequently sponged with the same. In the winter the water may be used warm; but this is not necessary in the summer. The bath may be employed at first daily for a fortnight or three weeks; and afterwards every other day, or only twice a week."

GENUS XVII. INFLAMMATION OF THE SPLEEN. (*Splenitis*.)

Pyrexia; tension of the left hypochondrium, with heat, swelling, and pain, upon pressure; no symptoms of nephritis being present.

Symptoms.—This disease often exists, perhaps, when it is not suspected. Together with the signs mentioned in the definition, there is sometimes more diffused pain extending towards the left shoulder, with stomach irritations and derangements, and often with hæmatemesis or vomiting of blood. Splenitis, like other visceral inflammations,

is either acute or chronic; and often, indeed most generally, the diseased state is constituted of a congestive subinflammatory condition of vessels that tends towards, but is actually under, the grade of real inflammation.

Causes.—Those of visceral inflammation generally. Protracted intermittents used to be proverbially considered as tending to infarctions of the spleen; these, however, are not so common, now that the secretions are more attended to in the management of complaints.

Diagnosis.—From hepatitis, with which it is often confounded, and sometimes connected, by the seat of the pain and enlargement. From nephritis, (with which also it occasionally connects itself,) by the absence of those marks that are peculiar to the kidney affection.

Prognosis.—Mere chronic infarction of the spleen may last for years, and, by judicious treatment, be eventually, in part, subdued without occasioning much inconvenience. Even active inflammation of the spleen does not tend so rapidly to disorganising terminations as that of some other viscera, perhaps from the power the organ possesses of working its own cure, by spontaneous discharge from its large and numerous blood-vessels.

Treatment.—Active inflammations of the spleen must be treated in the same manner as other visceral inflammations; the chronic infarctions to which it is subject, are best remedied by small doses of calomel or pilula hydrargyri, in conjunction with hyoscyamus and conium. (See for a formula, *Gastritis*.) Gentle purgatives must at the same time be employed.

GENUS XVIII. INFLAMMATION OF THE KIDNEY. (*Nephritis*.)

Pyrexia; pain in the region of the kidney often following the tract of the ureter; frequent discharge of urine, either pale or exceedingly red; vomiting; numbness of

the thigh; and retraction or pain in the testicle of the side affected.

Symptoms. — In addition to the signs mentioned in the definition, it may be stated, that the bowels are often constipated; the patient lies with most ease on the side that is affected; and, although vomiting is not constant, nausea is a characteristic sign of nephritic ailment.

Causes. — Calculary concretions; violent exercise, as of riding; blows on the loins, fæcal collections in the large intestines; acrid diuretics, such as the turpentine and cantharis; metastasis, especially of gout; exposure to colds and heats.

Diagnosis. — From lumbago, by the more fixed and less extended locality of the pain, discovered by pressure; by the retraction of the testicle; by the alteration in the quantity and quality of the urine; by the direction of the pain towards the groin and down the thigh; and, by the presence of sickness. From enteritis by the seat likewise of the pain; by its not being attended with the obstinate constipation of enteritis, and by the pulse not being so rapid or oppressed as in the latter disease. From gastritis, by the sickness or nausea not being accompanied with the burning sensation characteristic of true gastritis. From gall-stones or spasm in the gall-ducts, by the seat of the pain, the absence of yellowness in the skin, and by the urinary changes.

Prognosis. — In general favourable: the signs of approaching resolution, or tendency to suppuration, are nearly the same as in other inflammations. It may be remarked, that purulent formation and discharge of pus by urine may be the consequence of nephritis, and last even for years without very much affecting the general health. This has been accounted for by the kidney being an organ not of supply but of waste. Nephritis sometimes ends in

a destruction of the kidney's substance ; but seldom in positive gangrene.

Treatment.—General and topical blood-letting according to the urgency of symptoms. Bland and mild purgatives, as opposed to the stimulant and drastic ; of these, one of the best is castor oil : manna, too, is an excellent aperient in nephritis.

R Mannæ

Potassæ tartratis āā ʒ iij.

Infusi sennæ f ʒ iss.

Syrupi papaveris f ʒ j.

Fiat haustus.

Emollient, and purgative, and anodyne clysters are often highly necessary, and abundantly useful in nephritis (See for a formula, *Enteritis*), to which may be added a fluid drachm of tincture of opium. Rub the abdomen, and region of the kidney with castor oil ; apply warm fomentations of poppy ; give freely mucilaginous drinks, such as linseed tea, good barley water, with acacia gum dissolved in it, or decoction of mallows.

When the nephritic irritation is occasioned by, or connected with, lithic concretions, large doses of magnesia given in cold water, will be found of abundant service. (See *Calculus*.)

GENUS XIX. INFLAMMATION OF THE BLADDER. (*Cystitis*.)

Pyrexia ; swelling and pain in the hypogastrium ; frequent and painful micturition, or ischuria ; tenesmus.

Symptoms.—The definition comprehends the main symptoms of acute cystitis ; in general, however, as in nephritis, there is nausea, if not sickness ; and the pubic region is very painful when pressed upon. In chronic inflammation of the bladder, mucous and muco-purulent, or

sanious discharges are common, and prostatic or urethral affections accompany the vesical irritation; sometimes indeed, these latter are the sources of the former.

Causes.— Calculary and other local irritation; blows upon the pubic region; urethral and prostatic disease as just stated.

The *Diagnosis* is easy from the obvious locality of the complaint: the *Prognosis* is more favourable in the active or acute, than in the chronic form of the disorder; this last complicates itself with affections of neighbouring parts, and becomes a formidable, protracted, and often fatal, disease.

Treatment.— The acute kind requires pretty nearly the same treatment as does nephritis, with the application of leeches to the pubic region, and warm anodyne fomentations to this part.

In the chronic species, the treatment requires to be varied, with varying circumstances: a combination of the gum resins, particularly of copaiba and turpentine, with one or more of the vegetable narcotics, will often prove of much service.

R Extracti hyoseyami
 ——— conii āā ᠑j.

Copaibæ f ʒ iij.

Mucilaginis acaeiae f ʒ vj.

Gradatim misceantur, in mortario sensim affundens.

Aquæ puræ f ʒ v.

Fiat mistura; dosis, coehlearia duo bis terve in die.

R Terebinthinæ ehiae ʒ ij.

Pulveris rhæi ʒ j.

Contunde simul ut fiat massa, quam divide in pilulas triginta et sex; quarum sumat æger tres nocte maneque.

R Saponis duri

Sodæ subcarbonatis exsiccatae āā ʒ ss.

Extracti conii ʒ j.

Mucilaginis acaciæ q.s.

Fiat massa, in pilulas xx. dividatur; sumat duas vel tres bis terve in die.

Emollient and anodyne injections passed into the bladder, are often found serviceable.

GENUS XX. INFLAMMATION OF THE WOMB. (*Hysteritis*.)

Pyrexia; heat, tension, swelling, and pain in the hypogastrium; the os uteri painful to the touch. Vomiting.

Symptoms.—In inflammation of the womb, the spirits are generally depressed, and there is invariably more or less of sickness; the pulse is for the most part small, but neither so much contracted, nor so frequent, as in some other of the phlegmasiæ.

Causes.—Those of inflammation generally; interrupted menstrual and lochial discharge; constipation of the lower bowel.

Diagnosis.—From cystitis, by the pain being deeper seated, and by the absence of the urinary affections.

Prognosis.—Unfavourable, if the symptoms do not easily yield to proper treatment. When the inflammation is in the body of the uterus, a gangrenous termination sometimes takes place, indicated by remission of pain, sinking of the powers, hiccup, &c. If the peritonæal investment of the uterus is the seat of the affection, the unfavourable symptoms will be rather those of abdominal fulness and tension, with the pulse increasing instead of diminishing in frequency.

Treatment.—General and local blood-letting; anodyne

fomentations; oleaginous purgatives, and enemata, as in nephritis and cystitis.

When the inflammation is of a chronic and specific kind the treatment requires to be directed partly upon the same principles as in chronic affections of the bladder. (See *Cystitis*.)

GENUS XXI. RHEUMATISM.

A disease dependent upon external, and for the most part, evident cause; pain of the joints following the tract of the muscles, affecting the knees and larger joints, rather than the joints of the feet and hands, increased by exterior heat.

The sequela of acute rheumatism is arthrodynia or *chronic rheumatism*.

After rheumatism, a feeling as if of a violent strain, or subluxation; pains in the joints or muscles, especially when using them, more or less wandering, and relieved by the warmth of bed or any other external heat. Weakness, rigidity, and often coldness in the joints; no pyrexia, nor external swelling.

GENUS XXII. TOOTH-ACHE. (*Odontalgia*.)

Acute, or chronic rheumatism affecting the jaws, induced by caries in the teeth.

GENUS XXIII. GOUT. (*Podagra*.)

An hereditary disease, arising without evident external cause, but preceded for the most part by an unusual affection of the stomach; pyrexia; pain in a joint, generally of the great toe, but always affecting the joints either of the feet or the hands; recurring at intervals, and often alternating with disorders of the stomach, or other internal parts.

The varieties of Gout are :

1. *The Regular*, characterised by considerable inflammation of the joints, which lasts for some days, and recedes gradually with swelling, itching, and desquamation of the affected part.

2. *The Atonic*, alternating with atony of the stomach, or other internal organs, with fugacious and less decided, and unexpectedly occurring inflammation of the joints.

3. *The Retrograde*, marked by the sudden recession of the joint disorder, and the accession of atony in the stomach, or some other internal part.

4. *The Wandering*, with inflammation of internal parts, either not preceded by inflammation of the joints, or that inflammation suddenly receding.

GENUS XXIV. CHRONIC JOINT DISEASE. (*White Swelling. Arthropuosis.*)

Pains of the joints or muscular parts, often following a blow, deep, obtuse, and of long continuance; the swelling either not perceptible, or moderate and diffused; no inflammation; fever, at first slight, at length assuming a hectic character, while at the same time abscess of the part develops itself.

Symptoms of Rheumatism. — After exposure to cold or damp, lassitude and shivering occur, which sensations are followed by heat and pain of some one or other of the large joints extending itself along the muscles; this pain is often as fugacious as it is violent; it remits in one part, and seizes suddenly, and with equal force, another; sometimes the surface assumes a redness, and there is, for the most part, swelling, and a sense of tension in the joint or joints affected. The sympathetic fever that is excited often runs very high, but there is a want of that hardness, and sometimes even celerity of pulsation that charac-

terizes other inflammatory disorders; the tongue is white, the urine is high coloured; and there is often profuse perspiration. It is not only from joint to joint that rheumatism shifts; there is not seldom a metastasis to the heart, to the thoracic muscles, and even to the pleura, to the diaphragm, and to the stomach. The bowels are usually costive.

The chronic form of the disease is not attended by so much perturbation, but pains are experienced in the head, shoulders, knees, loins, and other parts, sometimes more fixed, and sometimes more changing, leaving a paralytic debility in the parts affected, or tending to the induction of contracted limbs, and stiffened joints. In either case, a general disposition to be suddenly translated from one part to another is characteristic of the disorder. And another leading feature of the complaint is, that it does not incline to suppuration. The chronic is sometimes a sequela of acute rheumatism; at other times it takes place without having been preceded by the active form of the disorder.

Causes. — Cold, occasioning an obstructed perspiration; damp air; wearing damp linen; or lying in damp beds; in fine, every modification of cold, or transition of temperature that is accompanied by moisture or damp.

In respect of the proximate cause of rheumatism, as systematics express themselves, it is not sufficient to say that it is an inflammation of articular membranes, and tendinous aponeurosis of muscles, unless we say that it is a specific inflammation of those parts: since common inflammation will occasionally implicate these structures, without giving rise to the phenomena by which the disease is characterised.

Diagnosis. — From gout, by its affecting principally the larger joints; by its being almost invariably traceable to

external excitants, and not preceded by stomach affections; by its affecting indifferently all ages; by its being attended with sympathetic fever of a marked and decided kind: from common phlegmon, by its not showing a disposition to suppurate; by its changing from one part to another; and often by the tremor and redness not being, as in common inflammation, always proportionate to the measure of pain.

Prognosis. — In general favourable: when a moderate and general perspiration takes place, the pyrexial symptoms decline, and no disposition is manifested towards metastasis to internal and vital organs, the disorder usually terminates well. The unfavourable indications are, an erythematic extension of cutaneous redness, profuse perspirations, and pale urine, with evident disposition in the disorder to make its attacks internally.

Treatment. — The acute rheumatism requires to be met by vigorous measures; and occasionally large blood-letting seems to be demanded by the violence of the inflammatory excitement. In the general way, however, I prefer making an impression upon the system, by active purging; and in my practice, nothing has appeared to answer the purpose of strangling the disease in its birth, so thoroughly as elaterium.

R Extracti elaterii gr. j.

Confectionis aromaticæ q.s.

Fiat pilula.

After the exhibition of one or two of the above pills, (one generally suffices,) let saline sudorifics be given, with opium and digitalis.

℞ Tincturæ digitalis ℥ x.
 Syrupi papaveris f ʒ ij.
 Liquoris ammoniæ acetatis f ʒ iij.
 Aquæ puræ f ʒ j.

Fiat haustus.

Saline purgatives too, must be continued. If the pyrexial symptoms are not high, but the pain still violent, give the compound ipecacuan powders.

℞ Pulveris ipecacuanhæ compositi gr. vj.

Fiat pulvis ; sextis horis repetendus.

Under these circumstances, calomel and opium will often be found of high advantage, especially after the nausea induced by the elaterium.

℞ Opii pulveris
 Hydrargyri submuriatis āā gr. vj.
 Confectionis aromaticæ q. s.

Fiant pilulæ parvæ vj. ; sextis horis sumendæ ; intermediis temporibus sumat æger haustum salinum communem, vel in statu effervescentiæ, vel non.

Colchicum is used by some with the same intention as the elaterium.

℞ Vini colchici f ʒ j.
 Aquæ puræ f ʒ iss.

Fiat haustus.

Dr. Williams recommends the *seeds* of the colchicum, as possessing the efficacy, without the deleterious quality of the root. He orders us to macerate for ten days, two ounces of the seeds of colchicum in a fluid pint of the spiritus ammoniæ aromaticus, and to give, as a dose, from one to two drachms two or three times a day.

When digitalis appears to be contra-indicated, and opium, either with or without calomel, disagrees with the

patient, the vegetable narcotics as the hyoscyamus, the aconitum, or the conium, may be employed. These, however, are, in the general way, more adapted to the chronic form of the complaint, and are best given in combination.

Externally, the inflammation of rheumatism, for the most part, is best treated by warm anodyne fomentations. In some instances, where the inflammatory action is excessively high, the precise nature of the inflammation somewhat doubtful, and the constitution good, repellent applications may be employed, such as a weak solution of the acetate of lead; at other times it will be right to have recourse to stimulant embrocations; these, however, like the narcotics above referred to, are, for the most part, adapted rather to the chronic than acute rheumatism.

Many years since, the practice of giving bark early and freely, in acute rheumatism pretty generally obtained; it was pushed, so to say, through the thick and thin of the inflammatory action, and in some cases, it will, undoubtedly succeed in subduing the force of the disease; but the practice of the present day does not run in its favour. I must confess, I should, in general, fear it; and should, and do, prefer paralyzing, as it were, the power of the malady by nauseating purgatives; then administering sudorific and saline purgatives, or calomel and opium, according to circumstances. When the disease has remitted, or, when from the first it may have evinced a periodical or intermittent character, then Peruvian bark may be given pretty early and freely, with a prospect of success.

R Extracti cinchonæ gr. vj.

Decocti ejusdem fʒ iss.

Tincturæ cinchonæ compositæ

Syrupi aurantiorum aa fʒ iss.

Fiat haustus.

Or from two to three grains of the sulphate of quinine may be given, made up into a pill, with aromatic confection.

The saline draughts which are given in the height of the disease may occasionally be supersaturated with five or six additional grains of the subcarbonate of ammonia; and some have recommended volatile alkali in combination with guaiacum as well as bark from the first.

R Tincturæ guaiaci ammoniatæ f ʒj.

Vitelli ovi q.s.

Decocti cinchonæ f ʒ xiv.

Fiat haustus.

Treatment of Chronic Rheumatism. — The stimulant warm, and tonic medicinals, such as those just referred to, are here more unequivocally admissible; these may be combined, or alternated with alteratives; and now it is that small and often repeated, or rather long-continued, doses of the same medicines may be had recourse to, that have in the acute complaint been administered more copiously, and for a shorter period.

R Guaiaci resinæ ʒij.

Pilulæ hydrargyri ʒj.

Pulveris digitalis ʒj.

Opii pulveris ʒ ss.

Mucilaginis acaciæ q.s.

Fiat massa; in pilulas quadraginta et duas dividatur; dosis,
pilulæ tres nocte manequæ.

R Terebinthinæ chiæ ʒj.

Pulveris antimonialis ʒj.

Guaiaci resinæ ʒ ss.

Misceantur in massam; cujus formentur pilulæ viginti et duæ; sumat tres nocte manequæ.

R Pilulæ hydrargyri submuriatis compositæ gr. ivss.

Opii pulveris gr. ss.

Fiat pilula ; bis in die sumenda, et sumat æger eodem tempore

Decocti sarsaparillæ compositi f 3 iv.

But compositions of this kind may be varied *ad infinitum*, according to circumstances; and it will be requisite after due or sufficiently lengthened trials of one, to have recourse to another. In but too many cases, the disease will be found to baffle all our varied endeavours. Warm clothing will prove one of the best *alteratives*. The subject of chronic rheumatism should not be contented with wearing flannel next the skin, but over it he should wear the wash leather, which will sometimes prove more efficacious than all the drugs in the *Materia Medica*. Bandaging rheumatic limbs with very tight rollers, has, in the practice of some, proved greatly available; and beating or rubbing them daily (the former is the most efficacious) will occasionally prove signally beneficial. Acupuncture and shampooing, the first consisting of running into the skin the points of several small needles together; the second, pinching and kneading it, are recently revived practices in this country, and sometimes are attended with efficacy. Warm bathing is usually employed at the same time, and lately the vaporous sulphur baths have been much in vogue; but it is questionable whether these do not owe their efficacy to the penetrating quality of the vapour, rather than to the specific operation of the sulphur. Electricity, more especially the voltaic electricity, is occasionally employed with decided and extensive advantage, in cases of paralysed limbs, from chronic rheumatism.

Symptoms of Gout.—For definition see p. 202. What is called a fit of the gout does but seldom come on till after the age of puberty; but to this rule there are some

exceptions It seizes the first joint or ball of the great toe, which with violent and peculiar pain, becomes also red and swoln. This attack is, for the most part, made in the night, after the first sleep; it usually lasts, with but little abatement, for twenty-four hours, and then becomes mitigated; it again, however, recurs, after perhaps the intermission of a day or more; and thus continues to harass the sufferer from ten to twenty or thirty days, more or less; for even in what is called the regular gout, there is much of irregularity in point of time. The individual thus having had his first fit of gout, sometimes enjoys a respite for two, three, four, or five years, and in the first attacks, the locality is principally the part just mentioned, but after three or four regular fits, the feet, the hands, the wrists, and other joints are affected; and the paroxysms come to visit more frequently, *viz.* annually or twice or thrice in the year. Of the varying modes and aspects of gout, the reader will find a good account in the appendages to the definition, but he must expect to find in practice, even still more irregularity than is there put down. The “atonic,” or “misplaced” form of the disorder especially falls upon the stomach, producing dyspeptic symptoms; the lungs giving rise to asthmatic affections; the heart occasioning syncope; the head leading to vertiginous disorder; and the hæmorrhoidal vessels occasioning piles. The kidneys too, are very commonly affected in gouty subjects, to such an extent indeed, that some have thought calculous disorder and gout to be merely different expressions of the same disorder.

Upon all the above organs and parts, the retrocedent gout will likewise occasionally fall, by which is meant, as the definition expresses, the inflammation in the foot or joints, suddenly receding and attacking the other positions: it should, however, be recollected that it is not

always inflammation that the viscera are thus affected with after the subduction of a gouty fit, but that the internal attack is sometimes made in the form of spasm.

Causes. — The predisposition to gout is constituted by a peculiarity of temperament; there is generally fulness of vessels, and an apoplectic make. It is hereditary; the natural predisposition is increased by high living, and by habits of indulgence, to which the gouty are especially inclined. These indulgences will sometimes prove positively exciting causes of the disorder; while at other times the fit is produced by suddenly changing from voluptuous to abstemious courses; by exposure to cold; by the cessation of accustomed employment; by inordinate evacuations; and by mental anxiety: in fine, whatever tends to general derangement will be likely to produce gout in habits of much disposition towards this form of disorder.

There seems to be in gout a disposition to lithic acid secretion, with an accompanying alkali, in small quantities; but whether the constitution which gives gout, merely gives power to draw this material more easily from the blood, or whether there is actually more of it existing in the blood does not seem to be satisfactorily made out. Certain it is that the same degree of digestive and other derangement happening on subjects not goutily disposed, will not produce gout; so that it is something *in se*, and inherently more than a stomach or chylopoietic disorder.

Diagnosis. — From rheumatism by the disease being more constitutional, and falling upon the viscera; by the smaller joints being the parts especially affected; by the more advanced period of life, at which it usually occurs; by the frequent presence of calculous disorder, and chalk stones, as they are called, in the small joints, by the fits not being preceded by pyrexia, as in rheumatism; and by

the metastatic, or translated affection being often of a spasmodic, or atonic kind, while in rheumatism it is always inflammatory. The perspirations also in gout have generally more acidity than in rheumatism; and gouty subjects are, for the most part, salacious; a circumstance which does not seem to have any necessary connection with rheumatic attacks.

Prognosis. — The more favourable, the less it has of constitutional bias, the less, too, the constitution is broken down, or the functions of the viscera impaired. A severe and full paroxysm, if it may be so expressed, is better than lighter and less inflammatory ones; and the danger is always considerable when the disorder manifests a tendency to internal seizure. The occurrence of chalky concretions shows an inveterate diathesis, and often argues a fatal tendency.

Treatment. — When the inflammation is exceedingly violent, it must be moderated by topical blood-letting, and cooling lotions (see page 160.): but the repression of the local disorder ought never to be precipitately aimed at; and even the moderating it ought to be confined to those subjects who are in the prime of life, and without much mark of deranged constitution. When the inflammation is not so high, and the constitution is more impaired, warm and anodyne fomentations will sometimes be of service; but in the general way, the less the local disorder is interfered with the better. Some, indeed, suppose, and probably with good reason, that beyond keeping the bowels attended to, and obviating, as much as may be, digestive derangement, the art of medicine is incapable of going with propriety, or effect; since a successful effort to shorten a paroxysm, is imagined to be the way of hastening its return, and eventually, increasing the disease. It is certain that several medicines possess the power of

lessening, for a time, the violence of gouty action. Elaterium, as in rheumatism, will do this. (See *Rheumatism*.) The colehicium too, seems more adapted to gout than rheumatism, and it is most probable that the eau medicinale of Husson, which is abundantly efficacious, is composed principally of this, as well as the specifics of Wilson and Reynolds. Opiates combined with antimonials, or calomel, may occasionally be used. (See for formulæ, pages 206. and 209.) In all cases the bowels must be kept in action; but often the warm resinous purgatives are rather indicated than the saline or cooling ones. A combination too, of the antacid principle, with the purgative is desirable to keep in view.

R Sodæ subcarbonatis exsiccatae ʒss.

Extracti colocynthis compositi ʒ iss.

Mucilaginis acaciæ q. s.

Fiat massa; in pilulas xxiv. distribuenda; sumat tres pro dosi.

R Tincturæ rhæi f ʒ ss.

Liquoris potassæ subcarbonatis f ʒ ss.

Infusi rhæi f ʒj.

Fiat haustus.

Sudorifics may occasionally be employed, but the indiscriminate use of antimony is rather objectionable.

Paroxysms of atonic or retrocedent gout are best treated by volatile alkali, which medicine serves the combined purposes of an antacid, stimulant, and sudorific.

R Ammoniæ subcarbonatis ʒ ss.

Confectionis aromaticæ ʒj.

Aquæ puræ f ʒ iss.

Fiat haustus.

Or if much pyrexial irritation be combined with the atony, give the liquor ammoniæ acetatis, supersaturated with five or six grains of the subcarbonate of ammonia. If

the kidneys seem, as is commonly the case, to partake of the disordered action, add spiritus ætherus nitrici f ʒj. to your ammoniacal draught. When the stomach becomes suddenly the seat of disorder, and medicinals are not immediately to be procured, give liberally warm brandy and water, or wine and water warmed with spice. Indeed, when you are clear that it is gouty retrocedence with which the patient is affected, stimulants are called for, even in affections of the head, or the chest: and in this, as above intimated, there is a difference from rheumatism; inasmuch, as the translated rheumatic derangement is always of an inflammatory nature, while in gout it is often atony and spasm. Ginger, and sulphuric æther are useful in retrocedent and atonic gout.

The returns of gouty paroxysms are best prevented by an abstemious course of diet, and regular habits of living; by keeping the alvine, and urinary, and perspirable secretions, from being obstructed; and by taking regular exercise. The aperients that are employed should generally have reference both to the prevailing acidity, and the tendency towards renal disorder.

R Pulveris rhæi radicis ʒj.

Liquoris potassæ subcarbonatis q. s.

Fiat massa; in pilulas xvj. distribuenda; sumat tres nocte manequæ.

R Sodæ subcarbonatis exsiccatae

Saponis duri āā. ʒj.

Pulveris rhæi radicis ʒ ss.

Aquæ puræ q. s.

Fiat massa; in pilulas xxxv. divide; et sumantur tres vel quatuor omni nocte.

Magnesia is a good aperient in gouty habits, on account

of the aperient and lithontriptic qualities that it possesses in combination.

R Magnesiæ subcarbonatis ʒ ij.
Spiritus ammoniæ aromatici f ʒ j.
Tincturæ rhæi f ʒ ij.
Aquæ puræ f ʒ iss.

Fiat haustus.

The continued use of bitters in gouty atony is a practice of questionable propriety: they have been supposed to give a tendency to apoplexy and paralysis; this probably is an erroneous supposition; but at any rate the habitual employment of any medicinals must be considered as at best, but a necessary evil; and they are more objectionable when they do not act upon the secretions, as do purgatives and diuretics.

The Portland powder, which was formerly in great request as an anti-arthritic, is composed of equal parts of the roots of gentian and round birthwort, of the leaves of germander and ground pine, and of the tops of the lesser centaury, all dried.

Bath waters are useful in old gouty cases, but have no specific agency.

Tooth-ach, and joint disease constituting the 22d and 24th genus, are referred to the cognizance and care of the dentist and surgeon.

AUTHORS ON THE SECOND ORDER OF PYREXIAL DISEASES,

(Those on inflammation generally, and on ophthalmia, have already been mentioned. See pages 164, 165.)

Abercrombie's Papers, reprinted from the Edinburgh Journal; *Balfour*, on Bandaging, &c. in Gout and Rheumatism; *Badham*, on Bronchitis; *Cheyne's* Pathology of the Membranes of the Larynx, and on Croup; *Farre's*

Morbid Anatomy of the Liver; *Hastings*, on Inflammation of the Mucous Membrane, &c.; *Haygarth*, on Acute Rheumatism; *Johnson (James)*, on Derangements of the Liver, &c.; *Johnson (James)*, on Gout, &c.; *Parkinson*, on Gout; *Pemberton*, on Diseases of the Abdominal Viscera; *Scudamore*, on Gout, &c.; *Sutton*, on Delirium Tremens; *Yelloly*, on Gastritis, reprinted from the Medico-Chirurgical Transactions.

ORDER III. FEBRILE RASHES. (*Exanthemata*.)

Contagious diseases, only affecting once during the whole of life; commencing with fever, and in a definite course of time, this fever being followed by small phlegmonous eruptions that appear sometimes in great numbers upon the skin.

GENUS XXV. SMALL POX. (*Variola*.)

A contagious synocha, with vomiting, and pain in the epigastrium upon pressure. On the third day commences, and on the fifth finishes, an eruption of phlegmonous papulæ, which in the space of eight days suppurate, and finally go off in crusts, often leaving depressed cicatrices or pits upon the skin.

Species I. Distinct Small Pox. (Variola Discreta.)

Marked by distinct circumscribed pustules that are few in number, and defined in appearance; the fever declining as the eruption becomes complete.

Species II. Confluent Small Pox. (Variola Confluens.)

Very numerous pustules, which are confluent and irregularly circumscribed, flaccid, and but little elevated; fever lasting after the completion of the eruptive process.

Symptoms of Small Pox.—The fever preceding the eruption is attended by pains in the loins and back, as well as by the symptoms noted in the definition; there is often much drowsiness; and the occurrence of epileptic fits prior to the eruption breaking out, is by no means uncommon. The first appearance of the eruption is like the bites of fleas, which usually come out first on the face, neck, and breast, and successively extend over the body. About the fifth or sixth day, a small vesicle with a depression in the centre, and containing a nearly colourless fluid, is observable on the top of each pimple. Now some degree of swelling in the throat, and difficult deglutition come on, which on the eighth day has extended to the face and eye-lids, and at this period the pustules are fully formed. On the eleventh day the swelling of the face subsides, the matter in the pustule has changed to an opaque yellow, and the hands and feet begin to swell. There is now, too, an appearance of what is called secondary fever, which gradually subsides, and disappears on or before the seventeenth day.

In the confluent species, for the most part, a more violent fever precedes the eruption, while the eruption itself breaks out in a more hurried and irregular manner. The eruptions assume an erythematic character, running into each other, and do not suppurate kindly, but contain an ichorous, brownish matter; the swelling of the face, and salivary discharge commence earlier; typhoid symptoms make their appearance, and often petechiæ are observed on the skin; blood is discharged, too, by stool, and sometimes by the urine, and other emunctories; the bronchial cavities seem to be laden with irritation, and the little patient often dies exhausted or suffocated.

Causes.—Specific contagion received either by inhalation, or by the skin: but in the latter case it appears

necessary that the outer skin should be abraded or punctured. (See Part I. page 40 and 81.)

Prognosis.—Favourable in the distinct kind if properly managed. In the confluent there is always considerable danger; the unfavourable indications are, the flattening of the pustules, or disappearance of the eruption, with a subsidence of the facial swelling; the breathing becoming much obstructed or oppressed; or marks of inflammatory and congestive conditions in the different viscera.

Diagnosis.—From a common attack of febrile disease in the commencement, by the more than ordinary pain in the back and loins; drowsiness, too, is more urgent, as well as epigastric tenderness, than in common fever. When the eruptions break out they are to be distinguished from measles by being larger, fewer, more distinct, and more papular; from variella, or chicken pox, by their being more distinctly circumscribed; more uniform in size; and by a more regular, and gradual progress of preliminary fever, and eventual suppuration. The pustule, too, is cellular, and depressed in the centre, if it be genuine small pox.

Treatment.—In distinct small pox, exceedingly simple; merely enjoining a cool regimen, giving saline medicinals if the fever run high, and guarding against accumulations in the bowels, or congestions in the viscera. If much restlessness prevails, give two or three drachms of the syrup of poppy with your saline and aperient draughts. In the confluent kind, the treatment is rather that demanded in typhoid fever. A combination of the nitras potassæ and cinchona will often show much power in keeping off unpleasant symptoms; the bowels are to be kept carefully acted on. In tendencies to sinking, especially if the eruption appear to recede, or tend inwardly upon the mucous linings of the bronchiæ or alimentary canal, (see

Part I. p. 50.) administer the subcarbonate of ammonia; apply also blisters to the chest. If diarrhœa be immoderate, give opium with the ammonia; and in some cases a combination of calomel and opium in equal doses, say from a quarter of a grain to a grain each, according to the age and circumstances of the patient, will be desirable. Here it is allowed that we have erythematic inflammation of mucous surfaces; but it is that kind and grade of inflammation which will best yield to bark, and wine, and opium, and cordials; or at least, these must at all events, be given when the system is evidently sinking. Even in the more distinct kind of small pox when the pock becomes flattened, and shows an indisposition to come freely out upon the surface, ammonia may be used with signal advantage; should there be much febrile action present, it will be right to supersaturate the saline draught with the subcarbonate of ammonia. (See page 158.)

GENUS XXVI. CHICKEN-POX. (*Varicella*).

After slight fever, papulæ similar to the small pox break out, which after a few days go off in scales, leaving no marks behind them.

Symptoms and Diagnosis. — Little need be added to the above definition and diagnosis between small and chicken pox, (which see.) It is generally about the fifth day at furthest that the varicella eruption disappears; it often commences, unlike the small pox, about the hips and back.

The *Prognosis* is always favourable, and the *treatment* necessarily simple, all that is required being to keep the bowels gently acted on, and give a little saline medicine, should the attendant fever be more than usually high.

GENUS XXVII. MEASLES. (*Rubeola, Morbilli*).

Contagious synocha with sneezing; watery eyes; dry cough, and hoarseness.

On the fourth day or a little later, numerous and small pimples break out on the surface, which are scarcely elevated above the skin, and which after three days go off in small branny scales.

Species I. Common Measles.

According to the above definition.

Species II. Small Pox Measles.

With more distinct and larger pimples.

Symptoms.— Excellently marked in the definition. The eruption for the most part, first appears about the face and neck, and successively spreads to other parts of the body. The fever does not abate as in small pox, upon the appearance of the eruption, but rather increases, as do the catarrhal symptoms. Sometimes the eruption at first appears to come out full and free, but very soon disappears; and precordial oppression, difficulty of breathing, and other internal symptoms are manifested, (see Part I. p. 51.) At other times, during the whole course of the disease, the skin shall be but just sufficiently marked to establish the character of the complaint. Typhoid oppression also, as in confluent small pox, not seldom occurs.

Cause.— Contagion, as in small pox. (See Part I. p. 40.)

Diagnosis.— From small pox by the catarrhal symptoms, and more clustered and less papular appearance of the eruption. From scarlatina by the eruptions being more papular than in this last affection; and also by the preliminary coryza and sneezing as opposed to the cynanchial irritation of scarlet fever.

Prognosis. — Always in some measure uncertain; if the fever runs high; if the difficulty of breathing be considerable; if delirium take place; if the eruption display an internal tendency; if it assume a pallid appearance; especially if it become livid; and petechial spots are intermixed with it, considerable danger is to be apprehended. Much diarrhœa, too, and vomiting are bad symptoms; but slight diarrhœa, with a free skin, and easy expectoration are favorable signs. It is always well, to see a good and regular crop of eruptions.

Treatment. — The indications are, to moderate excitement if high; to guard against or meet local inflammation, especially of the lungs; and to urge on the powers of the system, when disposed to prostration.

Excitement is to be abated by moderate and equal temperature, carefully preventing sudden or partial applications either of heat or cold. By the administration of saline purgatives, (see page 154.) By general blood-letting, or the application of leeches, to the chest or head should pulmonary or phrenitic manifestations become alarming. By the administration of digitalis, (a medicine which, properly regulated seems especially applicable to the irritation of measles) and by giving syrup of poppies in conjunction with nitre and the medicine just mentioned, in order to abate the cough.

R Tincturæ digitalis ℥ x.

Syrupi papaveris ʒ iss.

Potassæ nitratis ʒss.

Misturæ amygdalarum f ʒ iss.

Fiat haustus.

When the internal tendency of the eruption above alluded to, is combined with manifest debility, the subcarbonate of ammonia will be found one of the most useful of

medicinals, since it has a sudorific, as well as a stimulant quality, (see under confluent small pox ; the same indications being present, and the same rules being applicable.)

Remarks. — The cough subsequent to measles ought to especially attended to, and moderated by digitalis, or hyoseyamus, or conium, or poppy, or a combination of some or all of them ; and if very urgent, by applying a blister, or the tartrite of antimony ointment (see page 175.) to the chest ; otherwise a foundation, will be laid in scrophulous habits, for future hectic and phthisis. (See Part I. p. 85.)

GENUS XXVIII. SCARLET FEVER. (*Scarlatina*).

Contagious synocha ; on the fourth day the face becomes a little swoln, and at the same time a florid redness breaks out on the skin, in large spots which coalesce, and at the end of three days go off in furfuraceous scales ; anasarca often supervening.

Species I. Simple Scarlet Fever.

With no accompanying cynanche.

Species II. Scarlet Fever accompanied by ulcerated Throat.

Symptoms. — Here, again, the definition comprehends almost all the common symptoms of the complaint. The inflammation of the skin appears as an erythema, and is not phlegmonous, nor papular ; the accompanying fever showing often a typhoid tendency, especially when the tonsils are much ulcerated. Scarlet fever, like the measles, is various in respect to the freedom with which the cutaneous affection appears : sometimes we have a promise of a large crop, or rather of universal redness, which in a few hours recedes, and becomes pale ; sometimes the throat is malignantly affected ; at other times there is scarcely any tonsil disorder. The sequelæ, too, of the fever are very irregular, health and strength gradually, at times, follow-

ing upon the cessation of the complaint in its active form; while, at other times, after a day or two of good promise, languor and weakness are felt, the urine becomes scanty, and dropsical tumefactions make their appearance. For the most part, these are confined to the skin; but now and then, especially if there have been much pulmonary or abdominal affection during the fever, symptoms become manifest of hydrothorax or ascites.

Cause.—Contagion of a specific nature.

Diagnosis.—From measles, (see *Measles*.) From small pox, (see *Small Pox*.) As to the distinction between malignant sore throat, and scarlatina cynanchica, I do not believe it, in one sense, to exist; for although a malignant ulcer in the throat may be occasioned without the specific poison of scarlet fever being applied, I have seen several children of a family affected simultaneously, one having the sore throat without having the skin disorder, another having the eruptive without the cynanchial complaint.

Prognosis.—For the most part, upon the whole, more favourable than measles, since the internal tendency upon vital organs is not so great, (see Part I. p.51.) The later and less hurried the eruption, after the first appearance of fever, the better; and the fever assuming less of the typhoid type is favourable. The unfavourable symptoms are delirium; coma; præcordial anxiety; hurried respiration; partial patchy eruption, instead of a full and universal floridness of skin; pains about the angle of the jaws, and ears, with acrid running from the nasal membrane or meatus auditorius; saliva tinged with blood; and dry contracted skin.

Treatment.—Moderate the excitement when high, as in fever generally. When the eruption is full out upon the skin, and there is no perspiration, cold water may be used freely to the surface. When the eruption is disin-

clined to come out, and torpor without signal typhoid tendency prevails, the subcarbonate of ammonia may be used with much prospect of benefit, (see page 144. for *Formulæ*.) Nitre and cinchona bark in combination, as mentioned in malignant small pox, will be found applicable in the typhoid form of the disorder; the mineral acids too, as in page 158. may be ordered; and the frequent use of acidulated gargles is called for. It is often necessary to syringe the throat of children, or to apply more stimulant solutions in case of a sloughing appearance of the tonsils.

R Hydrargyri oxymuriatis gr. vj.

Mellis rosæ f ʒij.

Aquæ puræ f ʒvi.

Fiat solutio; tonsillis ulceratis sæpe applicetur parvis quantitatibus ope penicilli.

Blisters are sometimes called for in these, and other eruptive complaints; but they ought to be used with some reserve, when there is a gangrenous or highly typhoid tendency in the habit, as in this case they are apt to produce sloughing and exhausting sores.

GENUS XXIX. PLAGUE. (*Pestis*.)

Highly contagious typhus, with signal debility. On an uncertain day of the disease, an eruption of buboes and carbuncles.

This is a typhus gravissimus, and nothing further need be said in the present compendium respecting its symptoms or treatment. (See Part I. p. 59.)

GENUS XXX. ST. ANTHONY'S FIRE. (*Erysipelas*.)

Synocha, which lasts two or three days, with, for the most part, a sleepiness, and often delirium.

In some part of the skin, most generally in the face, an erythematous inflammation.

Species I. Vesicular Erysipelas.

The inflammation spreading wide and broad, and in some places forming large bladders.

Species II. Phlyctænoid Erysipelas. (Shingles.)

The erythema being connected with little papular eruptions which occupy principally the trunk of the body, and immediately become small vesicles.

Symptoms of St. Anthony's Fire. — This cutaneous affection is often ushered in with sickness, and much depression of animal power; the pulse is quick and sometimes hard, and after a day or two redness and tumefaction appear about the face or neck, which extends to the eyelids, and closes the eyes; this continues to increase for some days, often accompanied by great pain in the head, and delirium, and at length it terminates in desquamation. The head and face are not the only parts obnoxious to erysipelas; the legs sometimes are the seats of the disorder, and at other times, different portions of the body's surface.

Causes. — Irritations in the stomach and bowels; vicissitudes of temperature; over-eating or drinking; suppressed evacuations, as of the menstrual discharge. In some there appears a more than common disposition to plethoric fulness and erythematic inflammation; and these are the subjects that are predisposed to erysipelas.

Diagnosis. — Gout and scarlet fever are the complaints with which idiopathic erysipelas is most nearly allied in appearance; but these are easily distinguished from it by their accompanying tokens. (See *Gout* and *Scarlet Fever*.)

Prognosis. — In general favourable, but, not seldom, far otherwise; the kindly symptoms are, the comatose and delirious states leaving the patient as the efflorescence of the skin proceeds; this last shortly ending in a yellowish appearance, and not producing much vesication. If the fever continue urgent after the appearance of the efflorescence, assuming a typhoid type, and being protracted beyond the seventh day, if then the skin redness suddenly recedes, and internal tendencies become marked with prostration of strength, and weak or intermittent pulse, the patient must be considered in a highly dangerous condition.

Treatment. — For the most part, it is best to begin the treatment by an emetic; this being directly serviceable when the disorder is sympathetic upon *primæ viæ* irritation; and indirectly, when it shall have had another origin, by reducing action. When the subject of the disorder is in a high condition of sthenic excitement, robust in his constitution, and breathing the pure air of the country, we may have recourse to pretty large blood-lettings, but these ought to be instituted with much reserve in crowded hospitals or cities, and when the patient is not constitutionally strong. In this case we must be content with saline purgatives or diaphoretics. Local blood-letting is seldom advisable in erysipelas: indeed, leeches often bring the disorder on when there is a constitutional bias towards its formation. When the frame seems sinking, and the disorder tends internally, give subcarbonate of ammonia, (see page 215.); and when typhoid symptoms are urgent, bark and the mineral acids are called for. In respect to topical applications, the repellent kinds for obvious reasons must be used with much reserve, and only then resorted to, when the subject is young and vigorous, and the skin affection is at a distance

from the head; sprinkling the surface with flour, or starch or oatmeal will sometimes take off the distressing burning of the skin by gradually absorbing the acrimonious moisture that oozes out from the inflamed vessels. In cases of internal disposition, warm fomentations or spirituous applications may be resorted to in order to restore the cutaneous action.

GENUS XXXI. MILIARY FEVER. (*Miliaria*.)

Synochus with anxiety, and frequent sighing, with perspiration of a strong odour, and a prickling sensation of the skin.

On an uncertain day, small, red, distinct pimples break out over the whole surface, excepting the face, the tops of which, in the course of a day or two, present small white pustules; they soon disappear.

The definition gives the symptoms with sufficient correctness. The great characteristics of the disorder are, the odour of the perspiration and the præcordial anxiety. The eruptions are like millet seeds, sometimes red, and sometimes more white or pale coloured. They are occasionally produced by stomach disorder, but most commonly brought on by a heating, irritating regimen; by an overload of bed-clothes; and by confined heated apartments:— and are, therefore, of comparatively unfrequent occurrence, in this day of antiphlogistic good sense. Their prevention and treatment are sufficiently obvious. In case of retrocession, succeeded by internal symptoms of an alarming kind, ammonia and cordials must be resorted to.

GENUS XXXII. NETTLE RASH. (*Urticaria*.)

On the second day of the preliminary fever, little red spots appear on the surface, as if the skin were stung with

nettles, nearly disappearing during the day; and in the evening returning with the returning fever; after a few days, going off in scarcely discernible scales.

Symptoms. — In addition to the definition it may be stated, that large wheals are occasionally observed on the skin as well as the small spots; and that the disorder sometimes lasts, or disappears, and appears again for some months.

Causes. — Exposure to colds and heats will sometimes bring on urticaria; at other times it is occasioned by substances taken into the stomach. Shell-fish will, in some individuals, invariably produce a nettle-rash.

Treatment. — An emetic may generally be administered with propriety; and afterwards cooling aperients. In the chronic disease we are informed, that an infusion of serpentaria may be employed with advantage; for which the following formula is given.

R Radicis serpentariæ contusæ ʒj.

Aquæ puræ f ʒ xvi.

Coque per quadrantem horæ; dein cola.

R Hujus decocti colati f ʒ xiiij.

Tincturæ serpentariæ

Syrupi aurantiorum āā ʒj.

Fiat haustus; ter in die sumendus.

GENUS XXXIII. VESICULAR ERUPTION. (*Pemphigus*).

Contagious Typhus. — On the first, second, or third day, vesicles of the size of filbert-nuts appear in various parts of the body, which continue for some days, and at length, pour out a thin ichorous fluid.

This vesicular eruption is of rare occurrence, of uncertain origin, and does not seem to be influenced by medi-

cine on any other principle than of keeping the stomach and bowels clear, and meeting the incidental excitement that may be present by a cooling regimen. Should the attendant fever assume a typhoid character, bark, mineral acids, and syrup of poppy may be given.

GENUS XXXIV. THRUSH. (*Aphtha*).

Synochus; the tongue a little swollen; its colour, with that of the fauces, being rather purple. White eschars appear first about the fauces and margin of the tongue, occupying, at length the whole mouth; these eruptions are sometimes distinct; often coalescent; when rubbed off, are quickly renewed; and remain for an uncertain time.

The only idiopathic species is, the aphtha of infants.

The aphthous eruptions, that appear in the mouth and fauces, are generally accompanied by the same condition of parts, through the whole length of the intestinal canal, or at least through a considerable portion of it. They are merely indices of irritation growing out of debility, and are not under the control of any specific agents. When they take place in the diseases of old people, that have been of long standing, they are, for the most part, signs of approaching dissolution. Aperients and detergent gargles may be used, and the mineral acids taken internally, according to the extent of excitement or degree of debility: but to attempt their removal, without removing their cause, is like an attempt to whiten an Ethiopian's skin.

AUTHORS ON THE EXANTHEMATA.

Armstrong, on Measles, Scarlatina, &c. *Blackburne's* Observations on Scarlet Fever. *Haygarth*, on exterminat-

ing Small-Pox.' *Huxham*, on Fevers, Small-Pox, &c. *Moore's* History of the Small-Pox and Vaccination. *Peart*, on the Malignant Scarlet Fever, and on Sore Throat. *Willan*, on Cutaneous Diseases, (articles Measles, &c.).

ORDER IV. HÆMORRHAGES.

Pyrexia, with a discharge of blood, independently upon any external cause; the blood drawn appearing as in the phlegmasiæ. (See Part I. p. 51.)

GENUS XXXV. BLEEDING FROM THE NOSE. (*Epistaxis*.)

Pain, or a feeling of weight about the head; redness of the face; a flow of blood from the nostrils.

Species I. Idiopathic.

Species II. Symptomatic.

Hæmorrhage from the nose, is generally an effort of nature, to relieve a congested or plethoric state of the blood-vessels about the head; and unless immoderate, it is for the most part inexpedient to interfere with the discharge. When much general excitement prevails, the antiphlogistic regimen is to be adopted; if obstructed viscera have caused it, emulgent purgatives are to be employed; and in cases of old age and great debility, tonics and astringents may be required internally. The best local application are dossils of lint, or the scrapings from a beaver hat, put up the nostrils so as to plug them and permit a coagulum to be formed; the lint may be dipped in strong solution of common alum or sulphate of zinc. The sudden application of cold to any part of the body will sometimes stop epistaxis; hence, the vulgar remedy of a key, put down

the back. Plunging the head in a pail of cold water, impregnated with salt, has been had recourse to with success when other plans have failed.

GENUS XXXVI. SPITTING OF BLOOD. (*Hæmoptysis*).

Redness of the cheeks; a sense of uneasiness or pain, or sometimes heat in the chest. Difficult breathing; irritation in the fauces; a cough or heaving, with the ejection of florid, sometimes of frothy blood.

The idiopathic species are, the plethoric, the violent, the phthisical, the calcular, and the vicarious. The symptomatic, are the pneumonic, the exanthematic, the hydropic, the cachectic.

The sequela of hæmoptysis is *Consumption*. (*Phthisis*).

Emaciation and debility, with cough, hectic fever, and for the most part, purulent expectoration.

Symptoms attendant upon Spitting of Blood. — The above definition is very accurate; there is sometimes a hard full pulse at the time of the discharge; the irritation is usually just at the top of the larynx, and there is often a saltish taste perceived.

Causes. — Scrophulous laxity, with plethoric fulness of vessel, predisposes to hæmoptysis; and the predisposing age is from sixteen to thirty-five. A narrow chest gives too predisposition to the disorder, as does an obstructed state of one or more of the viscera; or a suppression of an accustomed evacuation; or obstructed perspiration.

The *Exciting Causes* are, violent exercise of the body or the lungs; excessive heat; the impure air of crowds; and mental agitation. The air, too, not otherwise impure, may be too much rarified. (See Part I. p. 52.)

Diagnosis. — From hæmatemesis, by the blood being frothy and florid instead of dark and grunious; by its

coming up in the act of coughing rather than vomiting; and by its being in smaller quantities than when it comes from the stomach.

Prognosis. — Unfavourable when the discharge indicates a phthisical state or tendency in the lungs; where it is not followed or preceded by much constitutional irritation; when it leaves behind it no difficulty of breathing, cough, nor pricking pain in the chest; and where there is no scrophulous habit, nor malconformation of the pulmonary organs, nor hepatic derangement, the prospect is favourable as to thorough and permanent recovery.

Treatment. — With a hard and jerky pulse, as it is called, and when the hæmorrhage is very considerable, repeated bleedings are called for, as in pneumonia; but it is by no means necessary to bleed in all cases of hæmoptysis. The antiphlogistic plan of treatment is invariably required when the hæmorrhage is of an active kind; heat in all forms and shapes must be avoided, and quiet enjoined. Saline purgatives are requisite (see page 154.), to which may be added, tincture of digitalis; or this last may be given alone in doses of ten, gradually increased to thirty minims. The nitrate of potass is a good medicine in active hæmoptysis. (See page 156.) The sulphuric acid is an excellent medicinal.

R Acidi sulphurici diluti ℥ xv.

Syrupi papaveris f ʒj.

Infusi rosæ f ʒ iss.

Fiat haustus.

Should the bleeding continue in defiance of the above treatment, more active astringents will be called for, and one of the most efficacious is the acetate of lead.

R Plumbi acetatis gr. j.

Opii pulveris gr. ss.

Micæ panis q.s.

Fiat pilula parva ; ter quaterve in die sumenda.

When this medicine is had recourse to, acids ought to be laid aside, otherwise bowel affections are likely to follow its use.

Blisters to the chest or back, will occasionally be found useful in exciting a vicarious irritation.

Pulmonary Consumption. — This is improperly introduced by Dr. Cullen as a mere sequela of hæmoptysis; for it often commences, proceeds, and becomes incurably confirmed, without any spitting of blood; and often this last is rather an accompanying symptom than a preliminary condition of phthisis.

Symptoms of Pulmonary Consumption. — The first indication of this disorder is usually a short, dry cough, with impeded and hurried breathing, especially upon exercise either of the body or the lungs; an indolence and languor insensibly creep upon the patient's habits and feelings, and he is observed to lose flesh; he is more than commonly also sensible to alterations of temperature, and, in this state, between positive health and actual disease, the patient will often continue for some length of time. But the breathing afterwards becomes more and more difficult; and the cough more decided; now too, pains are felt in the chest; a difficulty in lying on one side is experienced; the emaciation becomes more conspicuous and hectic irritation is decidedly established; burning heats are felt in the palms of the hands and soles of the feet; the pulse becomes not only quick, but hard; the urine high-coloured, and throws down a branny sediment; and the tongue, from being at first covered with a

whitish crust, now appears clear and red. The two daily exacerbations of the hectic fever (see page 162.) occur; the face comes to be marked at the time with a circumscribed spot of red. Morning perspiration too, principally about the neck, head, and shoulders, come to harass the consumptive subject; and, at this stage of the complaint, the white of the eye assumes a pearly appearance, which is remarkably and mournfully opposed to the swimming brilliancy of its transparent part. Now too, the sputum has become unequivocally purulent, the stomach fails of its retaining power, even though the appetite may not be deficient; the emaciation becomes extreme; the cheek-bones frightfully prominent; the eyes hollow and languid; the nails incurvated; the hair falls off; œdematous swellings of the ancles take place, and at length, a diarrhœa occurs, which last is usually a prelude to speedy dissolution; and the patient often dies, while he is still full of hope in respect to his state, and planning schemes for his enjoyment in life. This last feature, however, is not an invariable one of the disease; in some cases, the patient is conscious of his approaching end, and resigned to his fate; at other times, he wars against the disorder, and is worried by present irritation and gloomy prospects.

Causes. — Scrophula constitutes the predisposition to true or tubercular phthisis. (See *Scrophula*). The exciting causes are cold, and every thing, which may mechanically, as it were, injure the lungs, such as the occupations of needle-pointing, flax-dressing, hair-powdering, &c. It seems to a certain extent contagious. Various diseases also will excite the pulmonary tendency into action, as the catarrhal irritation of the exanthemata, especially measles; asthma, hooping-cough, bronchitis, pneumonia, hæmoptysis, will all and each of them,

occasionally come to be productive of suppurating lungs in the common way of inflammatory disorganisation, or or will excite the tubercular predisposition into the specific disorder in question; for genuine phthisis, I repeat, is invariably tubercular. Tubercles are small tumours, which have been supposed by some, to be indurated lymphatic glands; but, although this is not the case, their formation and progress seems to have been some intimate connection with the workings of the lymphatic system; they are at first indolent and harmless, but becoming inflamed, they suppurate and form little abscesses, which communicating with the air-cells of the lungs, are discharged by expectoration.

Diagnosis.—In the latter stages of pulmonary consumption, the disorder is too unequivocally marked to be mistaken for any other. Chlorosis and amenorrhœa, however, simulate the disorder in its early stages, and often terminate in its actual production. (For the features of distinction see *Chlorosis* and *Amenorrhœa*.) In respect to the distinction between pus and mucus, the eye will soon by use, learn to make it with quite as much accuracy as by any chemical tests; pus, it is merely necessary to say, is more compact in its substance, more opaque in its appearance, sinks sooner in water, and is of a more fœtid odour than mucus. When pus comes to be gradually formed from mucous surfaces (see Part I. p. 27.), the discharge is often a something between mere mucus, and positive purulent matter. This kind of intermediate substance is, however, more common to bronchitis than to tubercular consumption, and its presence may in some measure be taken as a diagnostic mark between the one and the other disease. Between specific or true consumption, and the disorders which commence in common inflammation, and in common suppuration, the distinc-

tion must be taken from the slow insidious progress of the former, and from its being accompanied by scrophulous marks. It may, in conclusion, be noticed that there is often a peculiar and semi sort of voice in the individuals destined to be consumptive and not unfrequently actual aphonia occurs. Whether much diagnostic information, in reference to the real condition of the lungs under circumstances of disease, is to be obtained by Laennec's stethoscope, I have not made sufficient observation to speak with certainty.

Prognosis. — Always unfavourable in confirmed tubercular phthisis. We hear talk of ulcers being healed, and consumptive cysts left, as cysts are formed in the brain after hæmorrhagia cerebri, and the disorder thereby, for a time stopped, but it is, to say the least, extremely doubtful whether strumuous tubercular ulceration that has taken place to any extent can ever be cured either by nature or art; that pus may be expectorated, and the patient recover we all know; but then this is the pus of common, not of specific inflammation, and takes place after bronchitis, or after pneumonia, not from tubercle.

Treatment. — Keeping down irritation constitutes the main principle in the management of phthisis, since it is irritation superinduced upon predisposition by which the disorder becomes developed; but then, in attempting to do this, we must recollect that there is often a formidably asthenic condition of frame, under the cover of high action, and that we may come to defeat our own purpose by pulling down too fearlessly. In the catarrhal irritation of incipient phthisis, small bleedings are, however, often imperatively demanded. Counter irritants are also called for, such as blisters, or the antimonial ointment to the chest. (See page 194.) It is in this condition of parts and of the whole that the vegetable narcotics, *viz.* the

digitalis, prussic acid, hyoscyamus, conium, and poppy separately, or some of them combined, will be found applicable; and if the pulmonary excitement partake, notwithstanding its constitutional and specific nature, of a sympathetic character, or is magnified, if not made, by stomach and bowel, or hepatic disorder, then small doses of the blue pill in conjunction with the narcotics, may be admissible. Gentle laxatives are always to be thought of as part of the curative measures; and some have much faith in the occasional, or even periodical, exhibition of emetics; these last have, however, for the most part been used in the latter or ulcerative stages of the disorder. Regulation of the diet, but more especially of external temperature is, in the early periods of phthisis, of most important consideration. Warm clothing should be enjoined, especially warmth to the feet, and when the menaces of the complaint are too unequivocal to be mistaken, we must give up all thoughts of braving it out, or hardening the frames of our patients, lest we add to the already existing irritation. Some, indeed, still pursue the plan, even in the most formidable state of consumptive manifestation, of cold applications to the chest, and other rough processes; and success may, occasionally, have followed their experiments: it must likewise be admitted, that the other plan of confinement and regulating temperature is but too often unavailing; but it is, I think, the safest, and upon the whole, most successful. While we keep the apartments of our consumptive invalid in a state of equable warmth, we must, at the same time, guard against those impurities in the air that are likely to be engendered by confining it; and we must at no time raise the heat beyond pleasant endurance. Early removal to more temperate climates, such as the south of France, or Devonshire, in our own country, may be thought of, when the

patient's circumstances permit; but the idea of any specific good to be got by these changes, beyond a greater equality of temperature, must be given up. In some cases the journey, or voyage may prove useful, by altering the actions of the system, and inducing a new series of movements. Inhaling tar vapour has been highly recommended, but it is for the most part too irritating, and rather applicable to bronchitis than to true consumption; a farinaceous diet should be enjoined, such as arrow-root and light puddings; milk, too, as being nutritious, without being irritating, ought to constitute a large portion of the phthisical patient's support; ass's milk, being more easily assimilated than that of the cow, is, in cases of weak digestion, more beneficial; but in no other way preferable. Shell-fish, especially oysters, seem sometimes abundantly to suit the consumptive. But these are matters that must be rather regulated by individual experience than abstract rule. All inhalations of factitious airs, whether to moderate the excitement of the first stages, or to stimulate and heal ulcers in the latter, are, I believe, pretty generally now abandoned as unavailable. In that condition of phthisis, which is between the hope of the first stage and the absolute hopelessness of the second, chalybeates have been employed with alleged benefit; especially the combination of myrrh, sulphate of iron, and alkali, constituting the celebrated mixture of Griffith, and now introduced into the Pharmacopœia, under the name of *mistura ferri composita*. This is especially applicable to the consumptive disorder of chlorotic females, and may, with address and management, be applicable to the states supposed. We do not, however, in the present day, find medicines of this class so available, or even so admissible, as the reports of our immediate predecessors would lead us to believe might be the case.

Moderate exercise, so as to keep up a constant tendency towards gentle perspiration, should be enjoined the consumptive invalid, when it can be used without too much exposure; horse-back exercise was formerly thought to be almost a specific in hectic irritation; swinging is recommended by some, upon the same principle of agitating and exercising, without fatiguing. We come to be more and more sceptical, and, I believe, justly so, with respect to the specific qualities of waters, as well as places, for consumption. The Bristol waters, for instance, have been extolled and held in reputation as highly anti-phthisical: but a practitioner of high name, and not certainly destitute of a disposition to credit remedial processes, and who resided at the hot wells ridiculed their pretensions to sanative virtue; and another physician tells us, that during a residence of some time, at and near the Bristol hot wells, he cannot charge his memory with a single instance where any person, labouring under a confirmed phthisis, experienced much relief from their use alone.

In the confirmed, or completely suppurative stage of the disease, it follows from what has been intimated above, that we are not to expect much from art; opening setons or issues in the fleshy parts of the chest, I have, however, seen of temporary advantage in prolonging life; and should the purulent sputum not come from almost the whole mass of the lungs, or not result from tubercular irritation, this measure might, in some cases, prove radically and permanently sanative. I think British physicians of the present day, look with too little regard upon the power of these counter-irritants. When there is not such a degree of inflammatory irritation as to forbid their use, tonics of different kinds, especially the *mistura ferri composita* may be given under these circumstances, and the

copaiba may be tried, should we suspect that the purulent discharge was partly, at least, from the bronchial membrane; but I repeat, that in true phthisis of a confirmed kind, it is idle to encourage the expectation of any radical or essential good being accomplished by our present knowledge of the powers of art.

GENUS XXXVII. HÆMORRHOIDS.

A sense of weight or pain in the head; vertigo; pain in the loins and anus; livid painful tubercles about the anus, from which, for the most part, blood flows; blood likewise comes from this part without any apparent swelling.

The species are:

I. From external tumours.

II. From protrusion of the gut.

III. Internal bleeding, without external swelling or protrusion of the anus.

IV. With pain and swelling, but no discharge of blood. (*Blind Piles*).

Causes. — The piles consist either of parts of the intestinal membrane strangulated by the contraction of the sphincter ani; or of varicose hæmorrhoidal veins; or of interstitial deposits from slow inflammation about the cellular membrane of the part; or of pressure from fæces interfering with the proper functions of the part. Their exciting sources are, costiveness; plethora; hard riding; suppressed evacuations; the too free use of aloetic or other purges that act especially on the lower gut; sedentary life, and pregnancy.

Prognosis. — Only unfavorable when the irritation causes inflammation which extends from the villous coat of the bowel into the cellular membrane, and occasions fistulous ulcers or sinuous sores. By the antients, hæmorrhoids were indeed, conceived salutary; and they are so in one sense,

that is, when they prove vicarious, as it were, of other morbid states. Thus affections of the head and lungs, and other viscera, are suspended or lessened upon the establishment of hæmorrhoids.

Treatment. — When the hæmorrhoidal flux is, as above intimated, vicarious, we should be careful not to arrest it too precipitately; and where there is much inflammatory irritation of the parts, or of the frame, we must go to work with our astringents moderately. In all cases gentle laxatives are called for, the great object of practice being to prevent the establishment of local irritation. Sulphur, and castor oil, and linseed oil, and confection of senna, are the best purgatives.

R Sulphuris loti ʒj.

Potassæ nitratis pulveris ʒss.

Fiat pulvis; ter in die sumendus.

R Olei lini.

Tincturæ rhæi āā f ʒ iss.

Aquæ menthæ viridis f ʒ v.

Fiat mistura; dosis cochlearia duo magna.

R Confectionis sennæ

Sulphuris sublimati āā ʒj.

Syrupi papaveris q.s.

Fiat electuarium; cujus sumat æger cochlearium unum parvum, vel cochlearia duo, bis terve in die.

Cooling astringents are to be applied externally, or injected into the rectum, under the above restrictions.

R Zinci sulphatis ʒj.

Aquæ puræ ʒj.

Fiat injectio.

In blind piles attended with much swelling and pain, hot fomentations, or sitting over hot water, will be found of the greatest service. When much debility is connected with the discharge, tonics and astringents are called for; the *tinctura ferri muriatis*, in doses of about ten or fifteen minims, often proves of great service under these circumstances. When the local inflammation runs high, leeches will be found necessary, and cooling saturnine applications.

After a long continuance of hæmorrhoids, and when fistula is threatened, the celebrated paste of Ward may be taken with much benefit; it is made as follows:

R Radicis enulæ campanæ pulveris.

Piperis nigri āā lbss.

Seminum fœniculi pulveris.

Mellis despumati āā lbj.

Fiat pasta. The dose is, the quantity of a nutmeg two or three times a day.

It is curious that this composition, formed as it is, in part, of heating irritating materials, should prove soothing, and sheathing, under circumstances of high irritation.

GENUS XXXVII. IMMODERATE FLOW OF THE MENSES. (*Menorrhagia.*)

Pains of the back, loins, and abdomen, almost equal to those of parturition. An unnaturally copious flow of the menses, or blood discharged from the vagina unduly.

Symptoms.—Menstrual discharges of an inordinately profuse degree, may, like other hæmorrhages, occur under precisely opposite states of parts and of the system, and the symptoms are regulated accordingly. Dr. Cullen is,

I think, wrong in talking of pains, like labour-pains, as connected with menorrhagia, for although this is sometimes, it is by no means frequently the case.

Causes. — The predisposition to menorrhagia may be considered a laxity of the uterine system, either connected or not with plethora; and, whatever tends to relax the frame generally, or the womb in particular, is calculated to engender or increase this predisposition. The exciting causes of the disorder are, violent exercise, particularly walking or dancing; much costiveness, occasioning great exertion in the expulsion of the fæces; exposure to excessive heats; inordinate indulgence in venery, especially during the menstrual discharge; passions and affections of the mind; organic disorders of the uterus; repeated miscarriages.

Prognosis. — It is seldom that the patient dies of the discharge; and, indeed, the prognosis is, for the most part, favourable when there is no organic disease in the womb, occasioning the flux. Sometimes the debility that is connected with, and in part, occasioned by the discharge, leads to œdematous swellings and eventually confirmed dropsy; and in this case the danger will be considerable, even without organic disorder.

Treatment. — In active menorrhagia, a combination of saline purgatives with sulphuric acid and syrup of poppy will be, in general, found the most efficacious medicinal.

R Magnesizæ sulphatis ʒ ij.
 Acidi sulphurici diluti ʒ xij.
 Syrupi papaveris f ʒ j.
 Infusi rosæ f ʒ iss.

Fiat haustus.

When the affection is rather marked by atony, than

much pyrexial excitement, more powerful astringents will be required.

℞ Tincturæ catechu f ʒj.

Acidi sulphurici diluti ℥ xv.

Aquæ puræ f ʒ iss.

Fiat haustus.

Or the acetate of lead may be administered, as recommended under hæmoptysis; applications to the perinæum and hypogastrium, of linen rags dipped in vinegar and water, may be had recourse to in case of excessive discharge; and enemata of salt and water may be thrown up the rectum. It is always of the utmost importance to preserve the body in a horizontal position, or rather with the thighs and legs raised a little above the horizontal line, and every exertion either of body or mind ought to be sedulously avoided.

Dr. Cullen marks one of the species of this disorder as menorrhagia alba, which is, in some measure, a contradiction in terms. The disorder, however, that is called the *whites*, is often exceedingly troublesome in females of a lax habit, and sometimes indeed like menorrhagia itself, it is occasioned by too much excitement, as well as by weakness both of the uterine organs, and general frame. When it is connected with a pallid appearance and debile habit, stimulants and tonics are loudly called for in its management; and when a disposition is present to organic affection of the uterus, which is evidenced by sanious being mixed or alternated with the white discharge; by lancinating pains about the womb; by a wasting in flesh and strength; and by a disposition to hectic irritation, then the vegetable anodynes may be administered, either in conjunction, or in alternation, or to the exclusion of tonic and stimulant medicines. In these

cases, too, slight mercurials may be occasionally useful. (See p. 187.)

Tincturæ cantharidis ℥ xv.

Aquæ puræ f ʒ iss.

Fiat haustus.

The cantharis is often very efficacious in arresting the discharge, when it is from mere atony.

The tincturæ ferri muriatis, in doses of fifteen minims, will often be found useful, as will the same quantity of copaiba balsam.

R Copaibæ ℥ xv.

Mucilaginis acaciæ f ʒ ij.

Tincturæ hyoscyami f ʒ ss.

Spiritus ætheris nitrici f ʒ j.

Aquæ puræ f ʒ iss.

Fiat haustus.

Aluin washes and astringent injections will sometimes be required in this complaint. When it occurs in married women, and is accompanied by much irritation and anxiety of mind, absence from venereal indulgence will occasionally be required. On the other hand, marriage will be found the most effectual remedy for those habitual discharges that often occur, and not seldom prove protracted and obstinate in young females.

To this genus Dr. Cullen appends hæmorrhage from the stomach (*Hæmatemesis*.) From the kidneys (*Hæmaturia*), and from the urinary bladder (*Cystirrhagia*.)

Symptoms connected with Hæmorrhage from the Stomach.

— A sense of weight, or anxiety, as it is termed, of the præcordia, usually precedes the discharge, which is brought up by vomiting, is in considerable quantity, and sometimes mixed with the contents of the stomach.

Causes. — Hæmatemesis is most commonly vicarious of other states, more especially of disorder in the spleen and liver, or suppression of the menstrual or hæmorrhoidal discharges; it is sometimes produced by blows upon the epigastrium, and not unfrequently arises in weak and worn out constitutions, from a species of erythematic inflammation, which occasions the meseraic vessels to pour out their contents.

Diagnosis. — From spitting of blood. (See *Hæmoptysis*.)

Prognosis. — It is more fearful as to its immediate consequence than hæmoptysis; although, when the patient dies after hæmatemesis, it is rather from an exhaustion consequent upon protracted visceral disorder than from the mere discharge of blood.

Treatment. — When infarctions are plainly discernible in the above-mentioned viscera, or when the hæmorrhage has followed upon suppressed discharge, give saline purgatives and follow them up by the milder astringents; when signal debility prevails, and the hæmorrhage is of a less complicated kind, administer tincture of catechu, or tincturæ ferri muriatis, or the acetate of lead pill. (See *Hæmoptysis*). Ten grains of the sulphate of alumen, three or four times a day, will often prove efficacious: it may be given combined with an equal quantity of tragacanth gum, in powder. I have been told by one practitioner, that in almost all cases of hæmorrhage, he finds his account in administering the patent medicine, sold under the name of Dutch drop; the dose and manner of giving it, are mentioned in the paper which envelopes the vial in which it is sold.

Symptoms connected with Hæmorrhages from the Kidneys and Bladder. — Pain, or sense of weight in the loins, or upon the pubic region; with occasionally a

difficulty, especially in the first efforts, to discharge the urine.

Causes.—Calculous and other foreign bodies in the kidneys or bladder, will give rise to the disease; but sometimes the discharge seems to be a sort of plethoric manifestation, the urinary organs being made use of, as it were, by nature, to convey away redundant blood. It sometimes follows violent blows or strains, and is occasionally the result of common inflammation in these very vascular parts.

Diagnosis.—The very high-coloured urine, occasioned by an admixture of bile, or other disordered states of the kidney or general system, does not stain linen of a red colour, as is the case in hæmaturia; nor, in the former instances, is a red coagulum thrown down to the bottom of the vessel.

Prognosis.—When the affection is unaccompanied by any indication of organic disorder, in the parts from which the discharge proceeds, the prognosis may be considered favourable. But these discharges are seldom thus idiopathic, and the degree of danger must be inferred from the degree of the producing derangement.

Treatment.—Saline purgatives, with syrup of poppies, as in the hæmoptysis. If calculus is present, mucilaginous drinks and medicinals will be demanded, such as large draughts of barley water, with tragacanth or acacia gum, mixed in it. Decoction of marsh mallows. (See *Nephritis*.) The tinctura ferri muriatis, in cases of much weakness, will be found useful. Uva ursi has long had a reputation in urinary discharges.

R Uvæ ursi foliorum ʒss.

Aquæ ferventis Oj.

Fiat infusum.

R Hujus infusi frige facti et colati f ̄ vij.

Pulveris potassæ nitratis ̄ j.

Syrupi papaveris f ̄ j.

Fiat mistura. Dosis pars sexta.

The peach leaf has been employed with alleged success in obstinate hæmaturia.

R Persicariæ foliorum exsiccatorum ̄ j.

Aquæ puræ Oij.

Decoque ad Oiss. ; liquore frige facto, coletur ; bibat æger Oj. in dies.

Oil of turpentine, in small doses, is occasionally employed in hæmaturia of long standing.

R Olei terebinthinæ ʒ xxv.

Mucilaginis acaciæ f ̄ ij.

Syrupi papaveris f ̄ j.

Aquæ puræ f ̄ ̄ iss.

Fiat haustus ; nocte manequè sumendus.

AUTHORS ON HÆMORRHAGIC, AND CONSUMPTIVE, AND HECTIC DISEASES.

Armstrong, on Pulmonary Consumption, Measles, &c. *Baron*, on the Origin of Tubercle. *Bayle*, on Phthisis, by Barrow. *Bourne*, on Uva Ursi in Consumption, &c. *Buxton*, on regulated Temperature in Cough, &c. *Clarke*, on Diseases of Females that are attended by Discharges. *Copeland*, on Diseases of the Rectum. *Crichton*, on Consumption. *Duncan*, on Pulmonary Consumption. *Forbes'* Translation of Laennec, on Diseases of the Chest. *Granville*, on Prussic Acid in Consumption, &c. *Howship*, on Diseases connected with the Secretion of Urine, &c. ; and on Diseases of the Lower Intestines. *Mansford*, on the Influence of Situation in Pulmonary Consumption. *Reid* (T.),

on Phthisis. *Rigby*, on Uterine Hæmorrhages, by Cross.
Southey, on Consumption.

ORDER V. FLUXES. (*Profluvia*.) See Part I. p. 54.

GENUS XXXIX. CATARRH.

Pyrexia, often contagious; increased secretion of mucus from the glands of the nasal, faucial, and bronchial membrane; or at least, a disposition to this increase.

The Species are :

- I. Common Catarrh : and
- II. Contagious Catarrh.

The symptoms of catarrh need scarcely be mentioned beyond what are comprised in the definition. The causes are said to be cold and contagion; it is, I think, probable, that a degree of contagion connects itself with all catarrhal affection, for you never see one child in a nursery affected by a cold, without the affection reaching the other children of the same family; the difference, I believe, between the influenza or contagious catarrh of Cullen, and common cold, is rather referrible to the state of the air; and the division should be into infectious and common, not into contagious and ordinary catarrh.

Prognosis.—Catarrh only, then, becomes dangerous, when it happens to meet with disordered predisposition; thus, that inflammation of the mucons membrane of the nostrils, &c. by which it is constituted, may become protracted and extended down into the bronchial cells, and thus form bronchitis; or it may excite the tubercular latency into action from contiguity and sympathy, and

thus come to be productive of true consumption; or it may prove an excitant of asthmatic disposition, or fall into common pulmonary inflammation: but in all these cases the disorder, before it is dangerous, becomes nosologically, a new affection.

Treatment.—Catarrhal irritation is to be allayed by aperients, diaphoretics, and demulcents, according to the degree of excitement, and accompanying hoarseness or cough.

R Potassæ nitratis ℥ ss.
Misturæ amygdalæ f ʒ iss.
Syrupi tolutani f ʒ ij.

Fiat haustus.

R Syrupi papaveris f ʒ ij.
Spiritus ætheris nitrici f ʒ j.
Mucilaginis acaciæ f ʒ iij.
Aquæ puræ f ʒ iss.

Fiat haustus.

R Pulveris enulæ.
Sulphuris loti.
Pulveris radicis glycyrrhizi āā ʒ ss.
Mellis despumati q.s.

Fiat electuarius; cujus sumat æger cochlearium unum parvum subinde.

R Oxy mellis scillæ f ʒ j.
Syrupi papaveris f ʒ iss.
Spiritus ætheris nitrici f ʒ j.
Misturæ ammoniaci.
Aquæ puræ āā f ʒ vi.

Fiat haustus.

The last as an expectorant after the inflammatory symptoms have subsided.

GENUS XL. DYSENTERY. (*Dysenteria*.)

Contagious pyrexia; frequent mucous or bloody dejections; the proper fæces being, for the most part, retained; griping pains; tenesmus.

Symptoms. — Dysentery sometimes appears in the first instance, in the form of a purely local disease, and, in that case, the pyrexial symptoms are not manifested till after the griping and tenesmus, and mucous and sanious discharges shall have occurred; sometimes the disease is ushered in by pyrexial irritation, loss of appetite, nausea, flatulency, and frequency of pulse. With the mucous and muco-sanguineous discharges, are sometimes passed indurated knotted masses of fæcal matter, called scybala; and the disorder sometimes rises to such a height, or continues for such a length of time, as to produce bearing down of the intestinal membrane; great prostration of strength; falling away of flesh; hiccup; and a fatal termination. At other times, the disease will produce chronic affections of the parts implicated, which will last for months, and the patient eventually recover.

Causes. — Every thing which tends to derange the regular functions of the intestinal canal, may tend to induce dysentery. I have seen it completely formed from the cretaceous mixture given injudiciously for diarrhœa. Obstructed perspiration; damp air; unwholesome diet may occasion it; and, like most other disorders, it will prove communicable or contagious, under circumstances fostering such tendency.

Its proximate cause, as pathologists express themselves, is constituted of a mixture of inflammatory action in the villous coat of the large intestine, giving rise to irregular contractions of the gut; locked up, or morbid secretions; and all the consequent disturbance.

Prognosis. — The favourable signs are, a tendency to general diaphoresis; while the urine throws down a sediment, and the stools gradually acquire their natural colour and consistence: the unfavourable symptoms are, dryness and contraction, alternated with clamminess of the skin, the pyrexial irritation continuing; the abdomen becoming tense; the tenesmus becoming more urgent; the pulse weak and irregular, the extremities cold, and hiccup and aphthæ making their appearance; while the disease shall become complicated with others, such as ague or hepatic disorders.

Treatment. — The dysentery that is met with in this country does not commonly require the use of the lancet; if, however, the irritation runs up very high, blood-letting, both general and topical, may be occasionally and under due restriction employed; the great objects of treatment are, to get completely rid of the scybala, and to keep under the inflammatory irritation and spasmodic contractions of the colon. An emetic, composed of ipecacuanha and antimony (see page 152.), may be premised. Of cathartics, which are indispensable in dysenteric affections, the castor oil is the best; it seems, as it were, made for the complaint; and should be given in half-ounce or ounce doses every day, or twice a day, till the whole scybalous matter is brought away. The oleum lini and tinctura rhæi, as recommended for hæmorrhoids, will often be found of service. When refrigerant or saline cathartics are employed (and these seem called for when the marks of inflammatory irritation run high), they should be combined with manna.

R Magnesiae sulphatis ʒ iss.

Mannæ ʒ iij.

Aquæ menthæ piperitæ ʒ iss.

Fiat haustus.

Emollient clysters are occasionally called for, with or without opium, according to circumstances.

R Decocti amyli Oj.
Tincturæ opii f ʒj.

Fiat enema.

To allay irritation, a combination of ipecacuan and opium, as in the pulvis ipecacuanhæ compositus, constitutes one of the best of medicines.

R Pulveris ipecacuanhæ compositi gr. vj.
Confectionis aromaticæ q. s.

Fiant pilulæ duæ ; ter quaterve in die sumendæ.

Warm fomentations and stimulant embrocations to the abdomen will sometimes be found serviceable; and it will be expedient occasionally to rub the abdomen all over with castor-oil, as recommended in enteritis, by which, unless I am very much mistaken, the expulsion of the scybala will be considerably expedited.

When the hardened fæces are all expelled, and the inflammatory and spasmodic irritation are got under, tonics are called for; and one of the best of these is the calumba, which may be given united to rhubarb.

R Infusi calumbi.
—— rhæi aa f ʒvj.
Tincturæ cardamomi compositæ f ʒj.

Fiat haustus.

When opiates are still required, the confectio opii of the Pharmacopœia is one of the best forms in which to administer it.

R Confectionis opii gr. xv.
Vini ipecacuanhæ ℥ xv.
Aquæ menthæ piperitæ f ʒ iss.

Fiat haustus.

The infusion of cusparia, or simarouba, or cascarilla, may be used in conjunction or alternation with calumba; but upon the whole, I think, the last mentioned bitter the best adapted for that intestinal weakness that has been brought on by protracted bowel disorder. When small points of ulceration have established themselves on the membrane of the intestine, giving rise to purulent discharge, chronic irritation, and hectic wasting, the vegetable narcotics are to be had recourse to with small quantities of the blue pill. (See for formula, page 147.) When the liver has had to do, with the origin of the disorder or takes on a decidedly disordered action during its course, mercurials in a large dose will be required; and, in all cases we must be careful not to push our tonics under the notion of debility, while the secretions continue obstinately out of order. The copaiba balsam, combined with one or other, or more than one of the vegetable narcotics, will occasionally prove advantageous in old dysenteries, connected with a chronically diseased and ulcerated state of the villous coat of the intestine.

R Extracti hyoseyami.

———— conii.

———— papaveris āā gr. xij.

Copaibæ f ʒ iss.

Mucilaginis acaciæ f ʒj.

Aquæ puræ f. ʒ v.

Fiat mistura; cujus sumat æger partem sextam bis terve in die.

Rice, barley, Indian arrow root, oatmeal, sago, and animal broths, are the proper articles of diet.

CLASS II. NERVOUS DISEASES. (*Neuroses.*)

Læsion of sense and motion, without idiopathic pyrexia, and without local disorder. (See Part I. p. 66.)

ORDER I. COMATOSE AFFECTIONS. (*Comata.*)

Diminution of voluntary motion, with sleep, or rather suspension of sense.

GENUS XLI. APOPLEXY.

Almost all the voluntary motions diminished, with an appearance of sleep (*sopor*), more or less profound, while the heart and arteries continue in action.

The species are, sanguineous, scrous, hydrocephalic, atrabilious, traumatic, from poison, mental, cataleptic, suffocative.

Apoplexy may result symptomatically, or sympathetically, from intermittent fever, continued fever, the phlegmasiæ, the exanthemata, hysteric disorders, epilepsy, worms, ischuria, and scurvy.

Symptoms. — Sometimes the attack is sudden, without any previous warning, the patient being seized with sensual abolition, as if by a stroke; at other times the full paroxysm is ushered in by many premonitory symptoms; such as vertiginous feeling; perception as if of something floating in the air before the eyes; loss of memory; faltering in speech; head ache; cold extremities; drowsiness; hæmorrhage from the nose; and, in fine, all the marks of cerebral disturbance. These, in what is called the more serous kind of apoplexy, will sometimes precede

the full formation of the disorder for months, and sometimes after their protracted existence, the patient shall become paralytic, or epileptic, or idiotic, and not have apoplexy properly or commonly so called. Apoplectic seizures generally occur between the ages of forty-five and sixty. The pulse is often slow, jerky, or half intermittent, when the apoplexy is fully formed.

Causes. — The predisposition to apoplexy is constituted by a full make, with short neck, and rather large head; this predisposition being encouraged by those habits of indolence and inactivity, which the constitutional bias engenders. The exciting causes of the disorder are: irregularities in diet; exposures to cold and heat, inordinate exercise; violent mental exertion, or passion; breathing impure air; translated disorder to the head, more especially gout, and hæmorrhoids; or rather in the latter case it is a vicarious affection of the brain from suppressed evacuation. Continued stooping will induce the disorder; Excess in venery may often prove its exciting cause. A long course of study, or watchfulness, or abstinence, or a depressed state of mind, or all these causes in combination, will occasionally engender apoplexy in a more chronic way; and in these cases the disorder is often induced without much vascular change, and it should appear that there are several different states, both of the body generally, and the brain in particular, that may be present during the full formation of the apoplectic fit. Sanguineous and serous apoplexy are scholastic and untenable divisions, and if divisions are to be adopted, they might be rather made into the apoplexies of acute fulness, or chronic fulness of vessel; into hæmorrhagic, (which is the most common cause, or, if it must be so considered, circumstance of the disorder, see Part I. p. 69.); and into

adynamic, or that apoplexy in which dissection would discover neither fulness of vessel, nor hæmorrhage from vessel, nor serous effusion, and which therefore must be referred to an atonic, or nervous, or adynamic condition of brain.

Diagnosis. — From epilepsy, by the absence of convulsions and foaming of the mouth, that characterise that disease; from hysteria, by the suspension of sense and motion, not being accompanied by the globus hystericus, or feeling of constriction about the throat; from intoxication, by the absence of any vinous smell about the patient, by the stertorous respiration, and for the most part, more invincible insensibility.

Prognosis. — Although an individual very frequently recovers from an attack of apoplexy, such is for the most part, the shock that is given by it to the nervous energy, that you may almost say with certainty, this will never again be what it has been. The full sanguineous apoplexy of early life, and which has arisen from some evident cause exterior to the body, may be considered an exception to this rule; but the exceptions are rare. The immediately unfavourable tokens are, the want of power in deglutition continuing, and the respiration becoming more hurried and laborious; the pulse increasing in quickness, while the extremities become cold, and cold partial sweats breaking out about the temples.

The favourable signs are, the breathing becoming more free and easy; the pulse less contracted and frequent; the supervention of diarrhœa, a diaphoresis warm and general making its appearance, or the occurrence of spontaneous hæmorrhage.

Treatment. — The indications are to remove pressure, rouse energy, and obviate irritation.

Bleeding largely from the arm, or jugular vein, or temporal artery, is called for in the apoplexy occasioned by a rush of blood to the head ; and even where hæmorrhage on the brain is only suspected bleeding seems a practice directed by instinct, if the propriety of it be not fully reconcilable to principle, or confirmed by experience. I must confess myself in some degree undecided with respect to the propriety of very copious bleedings in hæmorrhagia cerebri ; but thus much is certain, that whether you bleed much or little, or not at all, the mischief that has been done is, in a degree, irreparable. True it is, that extravasated blood has often been thrown out upon the brain, produced apoplexy, and the patient has, for a time, recovered by the absorption of the extraneous matter from the formation of organic membranes, which thus become cysts ; but the patient is almost invariably, sooner or later, taken off by a fresh seizure ; and I again repeat, that it is a questionable point, how far you have lessened the hæmorrhage by diverting the current of blood. When the seizure has been from mere fulness of vessel or vascular excitement, free bleeding is, in my mind, of unequivocal value, and this, is at least, to be said in favour of blood-letting in the hæmorrhagic species, that you are not always absolutely certain as to what is the precise state, causing or connected with the sentient and locomotive suspension. In all cases it is necessary to keep the head high, the patient being in a horizontal position ; to purge freely by enemata or suppositories, while deglutition is suspended, or to open the mouth and put two or three drops of croton oil upon the tongue. The aloetic purges, perhaps, are best for throwing up the rectum, as they stimulate the hæmorrhoidal vessels.

R Vini aloes f ʒ iij.
Infusi sennæ, vel
Aquæ puræ Oss.

Fiat enema.

Or in cases of much torpor the injections may partly be composed of turpentine.

R Olei terebinthinæ rectificati f ʒ iij.
Misceatur ope vitelli ovi, cum
Aquæ menthæ piperitidis f ʒ viij.

Fiat enema.

When the patient may have a little revived from the use of these measures, we are then to have recourse to milder purgatives, and sudorifics, and refrigerants, and local blood-letting, either by leeches or cupping, according to the magnitude of fever, or degree of congestion that may be still manifested. When the head continues very hot, cold evaporation lotions are to be used, as directed in phrenitis and fever; and it is better even in apoplectic cases, for the most part, that the blisters we employ should be placed upon the nucha or calves of the legs, than upon the shaven scalp; the subcarbonate of ammonia will be found very applicable, during recoveries from the fulness of an apoplectic fit, and it may be given alone, or in the way of supersaturation of the liquor ammoniæ acetatis, as is also directed under the head of fever.

Emetics in apoplexy are of doubtful propriety, and unless the fit have been obviously produced by something taken into the stomach, that requires to be evacuated, or the patient have been in a cachectic or serous state prior to the fit, they ought, I think, to be dispensed with. It is in these cases that the volatile alkali will often prove so

serviceable, and during the progress of recovery, the ammoniated tincture of valerian in drachm doses has been employed with advantage.

It will be necessary during the after-treatment to enquire into the state of the viscera; if these have obviously been deranged before the occurrence of the paroxysm, they must be especially attended to; and the stimulants which it may be thought necessary to administer, require, for the most part, to be modified and corrected by that class of medicinals that are termed deobstruent or alterative; which are, in fact, those that by acting gently and generally upon the secretions, obviate as much as may be, the disposition to these irregular impetuses of the circulation.

GENUS XLII. PALSY. (*Paralysis.*)

Only some of the voluntary motions interfered with, sopor often accompanying.

The idiopathic species are:

I. Partial palsy, affecting only some of the muscles.

II. Hemiplegia, in which the whole of one side is paralysed.

III. Paraplegia, affecting one half of the body, taken transversely.

IV. Palsy from poison.

The symptomatic species is tremor or shaking palsy.

Rationale of Paralysis.—Palsy is sometimes a mere sequela of apoplexy, and sometimes originates without the last as a preliminary disorder; it is occasionally, (but not so commonly as is convulsive disorder,) a mere sympathetic affection, as of worms in the intestines; and it is sometimes engendered by rheumatism, in which case, however, it has something in it peculiar. Partial palsies,

as of the whole of the lower extremities (*paraplegia*), may originate in one portion of the nervous organisation, as of the spinal chord, without any necessary implication with the brain; but in the general way, much of paralytic manifestation of a permanent kind is, in fact, partial apoplexy. Tremor, or shaking palsy, has been supposed to have its special seat in the cervical part of the spinal marrow; but till we know more than we at present do of the relative connexion of the cranial and spinal brain, with the ganglionic system of nervous organisation, we must put up with a good deal of vague and unsatisfactory theorising in reference to these several derangements of the sentient and motive powers. (See Part I. p. 66.)

Symptoms. — Palsy is often ushered in by a numbness, and sense of weight in the head; sometimes a creeping or convulsive twitching about the limbs precedes the attack; but it, for the most part, occurs without any of these admonitory signs; and when it does so, it may generally be considered cerebral, as opposed to merely nervous palsy.

Causes. — See above — the exciting causes of the disorder, and even the predisponents, are similar in respect of kind to those which induce apoplexy. Certain poisons, however, particularly lead will produce a species of palsy by direct influence upon the nervous power. (See *Colica Pictonum*.)

Diagnosis. — There is no stertorous breathing in palsy merely; and, as the definition states, the loss of motion is only partial, while the soporose condition is likewise rather incidental than necessary.

Prognosis. — When palsy is the sequela of fully formed apoplexy, it is seldom completely cured. When the cause has rather been nervous than cerebral spontaneous

diarrhœa has carried off the disease. Fever is stated by authors to prove a solution occasionally both of apoplexy and palsy. Sometimes sensation and motion will alternate, the return of one faculty after the suspension of it by palsy, being immediately succeeded by the suspension of the other; circumstances which have been adduced in favour of the hypothesis, that the nerves of sense and motion are constituted by separate and distinct fibrillæ. (See Part I. p. 61.) When palsy occurs on the left side, the prognosis is more unfavourable than the same extent of disorder on the right. When the attack happens upon the vital organs, it terminates life speedily; paraplegia, occasioned by injury to, or resulting from constitutional malady in the spine, is of protracted continuance, and difficult cure. The return of power in a paralysed limb, is usually preceded by a sense of warmth and pain, and itching; of course these are favourable indications.

Treatment to be regulated by the apparent cause, and by the constitution of the individual; if there is fulness of habit; plethora of vessels, and marks of cerebral disorder, bleeding and active purging will be with propriety had recourse to. On the other hand, if the deprivation of power be rather nervous, or adynamic than cerebral, and from compression, stimuli of a potent kind are called for, such as blisters; electricity, common or voltaic, the latter the best; warm bathing; friction to the skin, either by a flesh-brush, or merely the hand, which last, if properly and efficiently, and for a sufficient length of time used, is perhaps better than any brushing, or than even the employment of volatile embrocations; and with respect to internal stimuli, these require to be taken from the strongest order when their employment is permitted

by the absence of cerebral disorder or febrile excitement ; the subcarbonate of ammonia is decidedly one of the best for immediate effect.

R Confectionis aromaticæ ʒj.
Ammoniæ subcarbonatis ʒss.
Aquæ puræ f ʒ iss.

Fiat haustus.

Mustard-seed and horse-radish are employed as domestic medicinals ; a tea-spoonful of the former may be taken night and morning, in a little common or peppermint-water, or swallowed whole.

The ammoniated tincture of valerian is an excellent medicine, in the paralysis from nervous adynamia. It may be given in drachm doses two or three times a day, in a fluid ounce and a half of the infusum cascarillæ ; or the infusion of valerian, may be administered as in the following formula, when a warm purgative is required at the same time.

R Radicis valerianæ contusæ ʒss.
Aquæ bullientis Oj.

Fiat infusum.

R Hujus infusi colati f ʒ iss.
Decocti aloes compositi f ʒss.

Fiat haustus.

The ammoniated tincture of guaiacum has long had considerable reputation in paralysis ; it seems more particularly appropriate when the paralytic affection, as it often does, partakes in a measure of chronic rheumatism ; its dose is from one to two drachms given in milk, or mixed with mucilage with any proper vehicle. In old cases, where the secretions, as well as the nervous energy,

require rousing and regulating, the guaiacum itself with other substances, given in the form of pill, may prove serviceable.

R Guaiaci resinæ ʒ ij.
 Pilulæ hydrargyri ʒ j.
 Pulveris digitalis ʒ j.
 Opii pulveris ʒ ss.
 Mucilaginis acaciæ q.s.

Pilulas quadraginta et duas forma. Dosis, pilulæ duæ vel tres nocte maneque.

The nux vomica, in doses from two to eight or ten grains, has recently been given in palsy; and, according to the accounts of continental writers, with considerable advantage. I have proved it in my own trials to have a considerable influence in rousing nervous energy, but its use requires great care in respect to cerebral condition; for when there is any chronic affection going on in the brain, which perhaps, there is in the greater number of continued palsies, the nux vomica is likely to do mischief, as indeed are almost all stimuli, unless so managed as to act upon some of the secretions at the same time that they are influential on the nerves; and, in this particular, the subcarbonate of ammonia and ammoniated tincture of guaiacum, possess advantage, their tendency being to promote perspiration. Bath waters, warm sea-bathing, vapour-baths, and shampooing, are perhaps, under proper regulation, more serviceable in paralysis than medicinal courses, inasmuch as they are more agreeable to the patient, excite and amuse his mind, and act generally and beneficially upon the several secretions. One of the most requisite principles in the management of paralytic disorders, is so to keep the intestinal actions regulated, that

the determination to the brain be guarded against. The decoctum aloes compositum is a most useful purgative in paralysis.

In the paraplegia, or loss of power over the lower extremities from diseased spine, issues and setons are useful, if had recourse to before the disorder has penetrated from the ligaments to the bones. The moxa has been lately much used in these and other paralytic disorders as a cautery. This practice, however, has not much obtained in Britain. (See Dunglisson's Translation of Larrey on *Moxa*.)

AUTHORS ON APOPLEXY AND PALSY.

Abercrombie's Papers, reprinted from the Edinburgh Quarterly Journal. *Cooke*, on Nervous Disorders. *Parkinson*, on Shaking Palsy. *Philip (Wilson)*, on Vital Functions, &c.

ORDER II. ADYNAMIC DISORDER. (*Adynamiae*.)

Diminution of involuntary motions, either vital or natural.

GENUS XLIII. FAINTING. (*Syncope*.)

The action of the heart diminished, or even for a time suspended.

The species are :

I. Idiopathic.

II. Symptomatic.

The cardiac kind, originating from disordered affection of the heart itself, or its great blood vessels; the occasional arising from a manifest cause, and from a derangement of the whole system.

The symptomatic species depends, for its manifestation, upon a disordered state of the whole system, or of some parts of it beside the heart.

Syncope, as the above definitions intimate, is sometimes nervous, at other times organic ; it is occasionally referrible to the heart itself, and occasionally a mere sympathetic indication of other disorder. When the blood seems, as it were, to be gathering about the heart, from want of sufficient power to propel it forward, faintness is the result ; and, in this case, blood-letting is called for, to relieve the organ of its undue load, and give a new impulse to vital agency. In mere syncope, however, the natural re-action of the frame is for the most part equal to restoring an equilibrium, and no interference of art is called for ; even when the affection is more of the nervous kind, it is in general best not to crowd about the affected individual with our officious stimuli, but to let him have the benefit of pure air. After profuse evacuations, whether natural or artificial, a dose of volatile alkali (see page 213.), prepared with speed, and poured down the throat of the patient, I have seen preserve life, in cases where, without such assistance, it has seemed to me that the powers would irrecoverably have sunk.

GENUS XLIV. DYSPEPTIC DISORDER. (*Dyspepsia.*)

Loss of appetite ; sickness ; vomiting ; eructation ; rumination ; heart-burn ; stomach pain : these symptoms all, or at least some of them, occurring together, for the most part with constipated bowels, and without any (organic) affection, either of the stomach itself, or any other part.

It is idiopathic and symptomatic : the symptomatic being dependent either upon a disorder of the stomach of an organic kind, or on disease of some other part.

The symptoms of dyspepsia need scarcely be dwelt upon, beyond those indicated in the above definition : there is scarcely any unpleasant feeling of what is called the nervous kind, that the dyspeptic does not occasionally experience ;

and the exciting causes are generally sufficiently obvious ; every thing, indeed, which tends to debilitate or derange, will, in the dyspeptically disposed, become an exciting source of the disorder. It consists in morbid contractions of the muscular, and morbid secretions from the villous, coat of the stomach ; part of the acidities and gaseous disturbances which the dyspeptic is the subject of, are referrible to actual secretion from the internal surface of the organ, and part to fermenting processes going on in the aliment, in consequence of insufficient fibrous action upon the stomach's contents, and from the gastric secretion not being produced in due quantity and quality for the easy formation of chyme. Those sinking sensations to which a disordered state of the digestive power gives origin, are referrible to a deranged condition of the ganglionic system of nerves, which it is not possible to describe, or to the difficulty and labour with which the stomach, as a muscular organ, " performs its accustomed and salutary exercise."

When, from a mere state of debile action, and spasmodic irregularity, and disordered secretion, the villous coat of the stomach becomes the subject of an erythematic inflammation, or when a more specific condition follows dyspepsia, such as schirrous irritation, the disorder then becomes nosologically different ; and, indeed, these states, though the obvious results, at times, of dyspeptic affection, occasionally and even frequently occur without being preceded by this affection, which often exists as a mere adynamic disorder, independently upon fulness of vessel, or inflammatory diathesis of the part.

Diagnosis. — Between hypochondriasis and dyspepsia a distinction has been taken, from the low spirits of the latter having a sufficient source in actual disorder of the

stomach, which in the latter (hypochondriasis), the disorder is in the mind. (See Part I. p. 75.) Hypochondriasis, too, generally attacks the melancholic temperament, while dyspepsia affects persons frequently without any reference to constitutional peculiarities.

Prognosis.—From mere dyspepsia there is not, in general, much to be apprehended in the way of event; but the continuance of the disease in those disposed to disorganisation is likely to produce this disorganisation; and even phthisis itself, in the phthisically inclined, will occasionally grow out of digestive disturbances; so that the observer of disease ought to have a special regard towards constitutional bias, both in judging of its progress and probable termination, and in forming curative indications.

Treatment.—Let the dyspeptic be cautioned forcibly to flee from habits which have obviously caused his disorder. Let gentle emetics or purgatives be given, in order to get rid of the indigested mass, and excite the stomach and bowels to new actions. Let acidities be corrected by one of the alkalies, or by magnesia, which last is an excellent antidyspeptic, inasmuch as it not only neutralizes acidities, as do the alkalies, but with those acidities forms a purgative salt, which carries itself through the bowels. Let the state of the liver be ascertained, and if a torpid or irregular action of this organ be discovered, let some blue pill be combined with the purgatives employed. Let commencing schirrosities of the cardia, or the pylorus, be early recognized, and met by very small doses of mercurials, in combination with the vegetable narcotics. (See, for formula, p. 187. or 195.) And throughout, let the disordered state be treated with those materials, in the way of diet, that are found to suit

the peculiarities of the patient's digestive powers; and let all but the occasional use of spirituous stimuli be laid aside.

The gastrodynia, or violent pain that accompanies stomach affection, will often be greatly mitigated by the subnitrate, formerly called the white oxyde of bismuth.

R Bismuthi subnitratis gr. vij.
 Mucilaginis acaciæ f ʒ iij.
 Tincturæ rhæi f. ʒ iss.
 Aquæ menthæ piperitæ f. ʒ iss.

Fiat haustus.

Tincture of rhubarb will generally be found an excellent adjunct to other remedies for dyspepsia, unless a certain degree of gastric inflammation have supervened, and then it may be too spirituous.

R Magnesiæ subcarbonatis ʒss.
 Tincturæ rhæi f ʒ iij.
 Aquæ puræ f. ʒ iss.

Fiat haustus.

The liquor calcis, taken in milk, a quarter of a pint of each, will sometimes prove conspicuously serviceable in correcting the acidities of dyspepsia; but having been used for some length of time, it should be suspended, and purgatives and alteratives given in lieu of it, then after a little while resumed. As combining the antacid and purgative principle, the decoctum aloes compositum of the London Pharmacopœia, in the doses of about half an ounce, will often prove an effective medicine. It will be sometimes found necessary to add a few grains more of the subcarbonate of potass to each dose.

The pills recommended in page 195, and, at other

times, the nitric acid, internally, or the chlorine-bath, mentioned likewise in page 195, may be employed in dyspepsia with prospect of good.

For forms of saline purgatives, combined with bitters and deobstruents, see page 194.

When diarrhœa occurs in dyspepsia, it will be found necessary to give five grains of the blue pill every night while the *mistura cretæ* of the *Pharmacopœia* may be administered two or three times a day.

Blisters to the back, or to the epigastrium, are often useful in torpid or irregular states of the stomach; and the antimonial ointment prescribed in page 194. will sometimes divert a tendency to internal erythema out upon the surface. Warm clothing, especially to the feet and legs, must always be enjoined upon the dyspeptic; as well as daily exercise, not only of a carriage, or even on horse-back, but regular walking. Many persons become and continue dyspeptic, merely from being too much in the course of the day in the posture of sitting.

When a course of bitters is required, it will be right to vary the articles. From calumba, go to gentian; from gentian to anthemis; from anthemis to quassia. And the alkalies, likewise, it may be expedient to vary in the course of administration.

GENUS XLV. LOW SPIRITS. (*Hypochondriasis.*)

Dyspepsia, with languor, dejection, and apprehension of mind, without due cause; the temperament of the patient being melancholic.

This affection, inasmuch as it differs from dyspepsia, is a vesanic, rather than an adynamic disorder. (See Diagnosis of *Dyspepsia*; see also *Melancholia*.)

GENUS XLVI. GREEN SICKNESS. (*Chlorosis.*)

Dyspepsia, or a desire for eating innutritious food ; the skin pale or discoloured ; deficiency of blood in the veins, with anasarcaous swelling of the body ; debility ; palpitation ; retained menses.

Symptoms. — The chlorotic patient is indisposed to exertion ; complains of wandering pains about the loins and hips ; is subject to palpitations upon the slightest exertion, and sometimes the stomach derangement goes the length of inducing a desire for chalk, and other absorbents. In the progress and advanced state of the disease, the lips lose almost entirely their red colour, the eyes become encircled with a livid mark, and the face not only appears pallid, but comes to assume a yellowish or greenish hue ; “ *pallent et frigent omnia.*”

Causes. — General debility, and more especially of the lymphatic, lacteal, or assimilating system, just at the time that the constitution is about fully to develop its sexual peculiarities ; hence the uterus partakes in an especial manner of the systematic weakness, and the uterine disorder that is consequent complicates the original affection.

Diagnosis. — From pregnancy, by the absence of that fulness of the breasts, and morning sickness, and dark circle about the nipple, that mark an impregnated state of the womb ; from mere retention of the menses, by the plethoric fulness, and nervous rather than cachectic indications that accompany this last ; and from phthisis, by the absence of cough, and regular hectic exacerbations of consumption, although, even in chlorosis, the hectic tendency is manifest.

Prognosis. — In the general favourable, if the treatment be judicious, and the constitutional tendency of the

patient be not towards pulmonary or consumptive ailment.

Treatment. — Indications, to excite the absorbent energy, and invigorate the general frame. Purgatives, emetics, and steel, are the principal remedial means wherewith to effect these purposes. For an emetic give a scruple of sulphate of zinc. Let the purgatives be of the warm stimulating class; and it is right for the most part, that aloes enter into their composition.

R Pilulæ aloes cum myrrhâ.

Extracti colcyntidis compositi.

Pulveris sabinæ foliorum āā ʒ ij.

Mucilaginis acaciæ q.s.

Fiat massa; in pilulas xxx. dividenda quarumumat ægra; tres nocte maneque.

When the bowels have been well acted upon, and the stomach shall be able to bear it, administer steel; the *mistura ferri composita* of the London Pharmacopœia, being one of the most useful of chalybeate preparations; its dose is a fluid ounce, or more, two or three times a-day, with peppermint or pennyroyal water. The *pilulæ ferri compositæ*, in a dose of two or three five-grain pills, may be employed when the stomach is too irritable to bear the liquid medicine.

R Tincturæ ferri muriatis.

———— cantharidis āā ʒ xv.

Aquæ puræ f. ʒ iss.

Fiat haustus; bis in die sumendus.

Savin and the Spanish fly seem to possess some influence approaching to specific agency upon the uterine system; but in the general way, the business of restoring the menstrual flux in chlorosis is most effectually accomplish-

ed by measures which operate rather a sympathetic, or indirect, than an immediate or specific effect. In some cases of great irritability of the stomach, it will be right, in spite of the prevailing weakness, to premise bleeding. Change of air; exercise, especially on horseback; sea-bathing; agreeable society; are all likely to be of service to a chlorotic girl; and marriage, under favourable circumstances, is often a more powerful remedy than any thing that can be employed, either in the way of regimen or medicine. (See *Amenorrhœa*.)

ORDER III. SPASMODIC AFFECTIONS. (*Spasmi*.)

Irregular actions of muscles, or of muscular fibres.

SECT. I. IN THE ANIMAL FUNCTIONS.

GENUS XLVII. TETANUS.

Spasmodic rigidity of many of the muscles. Divided into tetanus, properly so called, the spasms occupying a great part or the whole of the body; and into trismus, which is a tetanic disorder, showing itself principally by spastic rigidity of the lower jaw.

Symptoms of Tetanus. — Difficulty of swallowing is often the first symptom, and with it, or even prior to it, a stiffness is felt in the back part of the neck; a pain attacks the breast, and shoots through to the back; the jaws become affected with trismus, or are locked, as it is called, the head is bent violently and forcibly backward, and then the disorder is named opisthotonos. When the curve is forward, it is called emprosthotonos. The abdominal muscles are also violently affected; and, as the malady continues to advance and recur, the countenance be-

comes most shockingly distorted; the tongue protrudes; the strength fails; and after the remission and recurrence of these dreadful affections for a longer or a shorter period, one universal spasm at length rushes upon the patient, and carries him off in its frightful embrace.

Causes. — Warmth of climate is a predisposing cause, the full violence of the disorder being almost confined to intertropical regions; the male sex is more susceptible of it than the female. The exciting sources of the malady are, sudden vicissitudes of temperature, irritating substances in the stomach and bowels, and especially lacerating wounds implicating more particularly tendinous structure.

Prognosis. — Generally unfavourable. When, indeed, the disorder occurs in consequence of lacerated wounds, very little hope is to be entertained. Tetanus, when it proves fatal, for the most part, terminates in the course of a few days.

Rationale. — Attempts have been recently made to refer tetanic, and other convulsive disorders, to inflammatory conditions of the spinal chord; but it would appear that a spasmodic commotion often runs through the whole of the muscular organisation, and only affects parts with inflammation in an indirect way. It is I think, then, more than probable that the redness of the spinal theca, or the pharyngeal, and other erythematic inflammations that occasionally occur, are incidental and secondary, rather than primary and excitative.

Treatment. — Opium, in very large quantities, proves one of the most powerful remedies in violent tetanic disorders. One ounce of laudanum has been given in twenty-four hours, and the failure of this medicine may have often been occasioned by too much timidity in respect to the quantity given. When the disease is the consequence of

a torn wound, a free division of parts ought generally to be had recourse to. When tetanus arises from stomach or intestinal irritation, powerful emetics or purgatives must be employed; the oleum terebinthinæ, in doses from an ounce to an ounce and a half, might be useful; opiate frictions down the spine are adviseable. The cold bath, mercury, and almost every other remedy, has been tried in tetanus; but I should be disposed to place little confidence in any thing beyond an entire division of lacerated parts, a powerful action upon the stomach and bowels, and the very liberal employment of opium as an anti-spasmodic.

GENUS XLVIII. CONVULSION. (*Convulsio.*)

Chronic and irregular contraction of muscles, independent on soporose affection.

These are idiopathic or symptomatic.

GENUS XLIX. ST. VITUS'S DANCE. (*Chorea.*)

Affecting individuals under the age of puberty, and usually between the tenth and the fourteenth year, with convulsive action of the voluntary muscles, for the most part on one side, the motions of the arms and hands simulating the gesticulations of stage players; when walking, one of the feet seems rather dragged than lifted.

Causes.—The predisposition to chorea seems to be constituted by a mobility of nerve. The exciting causes are, irritations in the stomach and bowels, teething, mental affections, and imitation of others.

Prognosis.—Seldom dangerous, unless the violent agitation fastens upon some vital part, and produces organic disease, such as hydrocephalus.

Treatment.—Purgatives; and if these do not succeed, tonics, one of the best of which is the nitrate of silver; but it is often found necessary to alternate this with the sulphate or oxide of zinc: cold bathing; sudden impression on the mind; this has occasionally both caused and cured chorea. (See *Epilepsy*.)

GENUS L. RAPHANIA.

A spastic contraction of the joints, with convulsive agitation, and violent pain, which is periodical.

It is rather curious that Dr. Cullen should have introduced this among ordinary diseases, since it is rare in its occurrence, and endemic; it has been supposed to be produced by the eating of ergot, or spurred corn.

GENUS LI. EPILEPSY. (*Epilepsia*.)

Convulsions with sopor.

The species are:

I. Cerebral.

II. Sympathetic; and,

III. Occasional.

Symptoms.—Some epileptics fall immediately upon the ground, and the limbs become violently agitated, without any premonitory signs; at other times the falling fit is preceded by dimness of sight, vertiginous confusion, and pain of the head, ringing in the ears, distension of the stomach and bowels from wind, palpitation of the heart, and other symptoms of nervous derangement. Occasionally we observe the *aura epileptica*, as it is termed, or a sense as if of cold air commencing in some part of the extremities, and directing its course up to the head. During the fit the muscles of the face are frightfully distorted; the tongue is thrust out of the mouth, and often

bitten; the excretions, particularly the urinary, are passed involuntarily, and the fæcal discharge is highly offensive. There is always, too, more or less of foaming at the mouth. After these symptoms have lasted for a longer or a shorter time, the patient gradually recovers with yawning, and a sense of lassitude; and he, for the most part, is without recollection of what has happened during the paroxysm.

Causes. — Predisposition to epilepsy is often hereditary; the exciting causes are all those which derange the mobility of the nervous system; such as vehement emotions, affections, or passions. Terror is a common cause of epilepsy. The physical causes are those that exist in the brain, such as slow inflammation, or congestion; tumours, polypi; spiculæ of bone; abscess; hydrocephalus; or those that primarily affect other portions of the frame, such as irritations in the alimentary or intestinal canal, more especially worms; suppressed evacuations, as of the menstrual discharge; repelled eruptions of the surface; difficult and painful dentition.

Diagnosis. — The distinguishing features of epilepsy are convulsion of the limbs, in connection with sopor, and the foaming at the mouth. (See *Apoplexy*.)

Prognosis. — When the malady depends upon cerebral conformation, or permanent disorder in the brain, it is incurable. It will sometimes leave the person that has been attacked before the age of puberty, at the time when the sexual characteristics appear. When the disorder is sympathetic, it for the most part yields with the yielding of the primary complaint. It often terminates in apoplexy, or madness, or idiotism.

Treatment. — If it be symptomatic of worms, vermifuges are of course its remedies. (See *Worms*.) If the fits are connected with manifestations of cerebral fulness of blood,

bleeding must be enjoined; if, on the contrary, an asthenic condition of the system, and want of cerebral excitement, are the concomitants, stimulants, especially the carbonate of ammonia, are loudly called for. (See p. 158.) During the fit, care must be taken to loosen every thing about the patient, especially his neckcloth, and buttons of his collar; thrusting a something, as a piece of wood, between the teeth, will prevent the tongue from being wounded, and is said to shorten the time of the fit. Dashing cold water over the face is sometimes proper and useful. It is always right, as in apoplexy, to let the head be rather high. As to prevention of the paroxysm's recurrence, we must endeavour to strengthen the nervous system, when the disorder is the result of mobility, founded on weakness; the most powerful of the tonics, for effecting this purpose, are the oxide and sulphate of zinc, the medicinal preparations of copper, the nitrate of silver, and the vegetable bitters, or the Peruvian bark. It will be found expedient often to vary and alternate these medicines, and sometimes advantage will be obtained by their combination.

R Argenti nitratis gr. ss.

Micæ panis q. s.

Fiat pilula; ter in die sumenda; gradatim augeatur dosis argenti usque ad grana tria vel quatuor.

R Zinci sulphatis gr. j.

Pilulæ galbani compositæ gr. ix.

Fiant pilulæ duæ; ter in die sumendæ.

R Zinci oxydi gr. iv.

Extracti gentianæ ℥ ss.

Fiant pilulæ tres; ter in die capiendæ.

R Cupri ammoniati gr. j. ad iij.

Confectionis aromaticæ q. s.

Fiat pilula ; ter in die exhibenda.

The sulphate of quinine would appear to promise much good in epilepsy from debility, as it will not be so likely to nauseate the stomach as the requisite quantities of bark in substance.

While administering these medicines, it will be necessary to attend to the alvine and other secretions, and if any marks of plethora present themselves, these must be met by local, if not by general blood-letting, even at the time that we are persisting in our generally tonic plan of treatment.

I think it doubtful whether much good is to be effected in epileptic affections, by the class of medicinals that are called antispasmodic, such as castor, assafœtida, musk, æther, and others. The valerian, however, seems not only antispasmodic, but permanently tonic, to the nervous organization ; and as such especially applicable to convulsive and other affections, the origin of which is in pure debility of the sentient and motive powers. The purgatives that are employed in epilepsy ought, for the most part, to consist of those which are warm and stimulating ; and in case of the disease depending in females, as it sometimes does, upon uterine irregularities, the decoctum aloes compositum will be found especially serviceable. The dose is from a fluid half ounce to an ounce and a half.

Sea and cold bathing are sometimes beneficial. An emetic, or a large dose of opium, as in intermittent fever, just before the recurrence of the fit, is said to prevent or mitigate it ; the attack, however, is, for the most part, too sudden to admit of these expedients.

Many are the reputed specifics in epilepsy, such as the viscus quercinus, or misletoe; the *gratiola officinalis*; the *rhus radicans*; the *cicutaria*, &c. But in the present day, scepticism respecting the virtues of these reputed remedies increases upon us, and we are disposed to think nothing operative, but what has either a manifest agency upon the secretions, or a decided influence in giving tone and energy to the nervous system.

The oleum terebinthinæ, as an antiepileptic, perhaps, came to be lauded on account of its virtue as an anthelmintic; and its continued employment, in doses of about thirty minims, twice a day, in peppermint-water, may prove positively beneficial, when the epileptic disorder is connected, in the way of cause, with intestinal irregularities. But of confirmed epilepsy, arising from hereditary conformation, permanent brain disease, or any other inherent and untangible source, if time may be looked to as a cure, medicine certainly cannot.

Change of climate, and habits of life, may occasionally have operated with radical and permanent benefit.

SECT. II. AFFECTIONS OF VITAL FUNCTIONS.

In the action of the heart, producing palpitation; in the action of the lungs, occasioning asthma, dyspnœa, and hooping-cough.

GENUS LII. PALPITATION. (*Palpitatio*.)

Vehement and irregular motion of the heart, which when idiopathic, or properly cardiac, is almost constant, or at least frequently returns without manifest exciting cause.

This is a disorder which only admits of palliative reme-

dies: it is sufficiently evident, that all sources of mental emotion or corporeal irritation, should be sedulously avoided by those who have a decided disease in the heart of an organic kind.

GENUS LIII. ASTHMA

Difficulty of breathing, recurring by intervals, with a sense of tightness in the breast, and a wheezing respiration. No cough, or an obstructed one, being attendant upon the commencement of the paroxysm; but becoming free, and accompanied by expiration of mucus, towards its close.

Symptoms. — An attack of asthma is often preceded by drowsiness, pain in the head, and a feeling of flatulent fulness about the stomach, with a depression of spirits, and sluggish bowel. At other times, the disorder, attended by the symptoms marked in the definition, seizes upon the patient at once: this is often in the night, after the first sleep; and it recurs nightly for some length of time. The patient has, for a time, a distressing sense of suffocation, which, with the wheezing, and subsequent expectoration are truly characteristic of this dreadful disorder.

Causes. — In the hereditarily disposed, asthma will occur from almost any cause, which in others create common derangement; violent exercise; mental agitation; suppressed evacuation; receding exanthemata; stomach, or hepatic, or bowel, or uterine, or renal irritation will, all under predisposition, prove excitants of the disorder.

Diagnosis. — It is distinguished from pulmonary inflammation, either of an ordinary or specific kind, by the periodical character of its attacks, the patient in the intervals being free from disease, by the wheezing, and by the peculiar sense of suffocation.

Prognosis. — Generally unfavourable, when confirmed ; when it takes place in young persons, and is traceable to obvious cause, a recovery may be expected. Its fatal termination is, for the most part, by the induction of other diseases, such as organic affections of the heart, and hydrothorax.

Treatment. — In habits of much plethora and high action, blood-letting is required in the paroxysm ; in taking away blood, however, we must recollect the spasmodic nature of the disorder, and its tendency to terminate in hydrothorax. Antispasmodics are often freely admissible, and combinations of these with anodynes prove useful.

R Spiritus ætheris sulphurici compositi f ʒj.

Tincturæ hyoscyami f ʒss.

———— opii ʒvj.

Syrupi simplicis f ʒj.

Misturæ camphoræ f ʒ iss.

Fiat haustus.

But one of the most powerful agents with which I am acquainted, as adapted to the circumstances of asthma, is the stramonium.

R Extracti stramonii gr. ss.

Confectionis aromaticæ q. s.

Fiat pilula ; ter in die sumenda.

The belladonna, and aconitum, and digitalis, and eonium, have been administered with the same intention.

Towards the close of the paroxysm, when expectoration is not free, let expectorant remedies be administered.

R Misturæ ammoniaci
Aquæ puræ āā f ʒvj.
Tinct. scillæ m x.
Syrupi tolutani f ʒj.

Fiat haustus.

The application of a blister to the chest is often highly useful. The bowels must be briskly acted on with the warm and aromatic purgatives ; and both in the treatment and the prevention of asthma, but more especially in the latter, the state of the stomach, and first passage, must be sedulously attended to. Dr. Bree treats asthma as a stomach disorder ; he cautiously confines the diet to easily digested materials, and gives carbonate of steel, soda, &c. to strengthen the fibres of the stomach, correct the acid fermentation, and alter the internal secretions. In this view, also, he recommends small doses of the mineral acids. Warm clothing is always necessary in asthma. Coffee is sometimes found to abate the violence of the disorder. Regular exercise, both of walking and horseback, should be enjoined : an assiduous care should be taken not to check perspiration. Change of air is often desirable ; but there is great irregularity, (and often inexplicably so,) with regard to the appropriate kind of air for an asthmatic ; some being benefited by a warm, others by a cold atmosphere ; some breathing best in a humid, some in a dry situation ; some courting the vivifying air of an open country, others loving rather the smoky atmosphere of a large city. Issues are occasionally of service to old asthmas ; and some are in the practice of giving an emetic just before the expected accession of the fit.

GENUS LV. DIFFICULTY OF BREATHING. (*Dyspnœa.*)

Respiration difficult, and continually so, without sense

of tightness in the breast, but rather of fulness or infarction : a constant cough.

Dyspnœa is rather a symptom of other diseases, than in itself a malady of a specific kind. Asthmatic and other impediments to free respiration are often obscure in their rationale ; sometimes there seems to be a sort of spasmodic stricture in the bronchial cells, without inflammatory action on the one hand, or effusion of lymph, or mucus, or matter, on the other hand ; and then the true spasmodic asthma is present ; at other times the secretion or effusion is temporary, and the pituitous asthma is formed ; then again it is permanent, and permanent difficulty of breathing, or dyspnœa, is produced. This dyspnœa may, indeed, be occasioned by other causes of a more extensive nature, such as adeps pressing upon the bronchiæ, or mal-conformation of the thoracic cavity ; in the one case the remedy is obvious, in the other it must be obvious there is no remedy.

GENUS LVI. HOOPING-COUGH. (*Pertussis.*)

A contagious disease : convulsive strangulating cough, with sonorous inspiration, constantly recurring ; frequently vomiting.

Symptoms. — Hooping-cough often exists with very little more than ordinary catarrhal symptoms for two or three weeks ; the breathing, however, will generally be found to be more difficult and obstructed than in common cough ; at length the whooping sound is heard, which is occasioned by the air rushing through the glottis with unusual force and rapidity, to make up, as it were, for the convulsive and frequently recurring expirations. After the fit or fits are over, a considerable quantity of mucus is brought up, by which the little patient is relieved from his distressing and suffocative sensations, and he returns to his play as if nothing had happened or was again to

happen. Vomiting frequently terminates a violent paroxysm, and then, for the most part, the subject of the disorder expresses a great desire for food. But the peculiarity of the complaint is certainly this, that in the intervals of the fits there are no reliefs of the disorder, until, by the protraction of the malady, the individual becomes worn down, or bronchial inflammation, of a permanent kind, have taken place of the mere spasm by which, in the first instance, the distemper seems to be constituted.

Causes. — Specific contagion. Whether it may arise spontaneously, or whether, under epidemic peculiarities of the atmosphere, it may be made to supervene upon common catarrh, is a doubtful and disputed point. Its proximate cause [I dislike this expression] seems, as just intimated, to consist of spasm in the first instance, and congestion and inflammation in the course of time.

Diagnosis. — I have already intimated, that the distinguishing peculiarities of the affection are the whooping noise, the complete cessation of the distressing feelings in the intervals of the fits, and the paroxysms ending in vomiting.

Prognosis. — When the disorder occurs after the child has got through dentition, when the strength seems but little impaired, and the tendency to pulmonary inflammation does not manifest itself, expectations of thorough recovery are well founded. The unfavourable concomitants are, early infancy, much seeming of pulmonary congestion; and the occurrence of convulsions; indeed, the bias of the disorder is often towards head affection in young children.

Treatment. — If inflammatory or congestive appearances manifest themselves, put leeches upon the chest or head. Give emetics of ipecacuan and antimony com-

bined; let the bowels be kept free; meet the pyrexial irritation by saline diaphoretics, and the supersaturated liquor ammoniæ acetatis, (that is, supersaturated with ammonia), should there be much appearance of sinking. Give hyoscyamus, and conium, and digitalis, and prussic acid, in conjunction or separately, when the cough seems purely spasmodic; occasionally change these from one to the other. When there is much difficulty of expectoration, add a little of the wine of ipecacuan, and the oxymel of squills to the above antispasmodics. Correct the stomach acidities by carbonated soda or potass. Apply blisters to the chest, or the tartarite of antimony ointment, with opium. (See p. 175.) Rub the chest and neck with diluted tincture of cantharides; give small doses of this internally; and when the violence of the disorder is abated, debility only remaining, give tonics, such as Peruvian or Cascarilla bark, or small doses of the liquor arsenicalis. Above all, change of air, which is magically operative in whooping cough, in cases of protracted convalescence, and indeed, it sometimes will prove abundantly beneficial, even during the height and violence of the complaint.

SECT. III. AFFECTIONS OF NATURAL FUNCTIONS.

GENUS LVI. WATER BRASH. (*Pyrosis*.)

Burning pain in the epigastrium, with copious discharge of an aqueous fluid, for the most part insipid, but sometimes acid.

Symptoms. — The fits of water brash generally recur in the morning, there is sometimes an accompanying sensation, as if the stomach were drawn down towards the back. For the most part, as stated in the definition, the discharge

is watery and thin, but it is sometimes glutinous and ropy.

Causes. — It appears to be a peculiar spasm of the stomach, affecting the secretions of the organ; it is sometimes brought on by poverty of diet, and mental anxiety. It often continues by habit for a long time.

Treatment. — Antispasmodics and absorbents; a plaster composed of equal parts of the emplastrum opii, and emplastrum cunimi to the epigastrium; the subnitrate of bismuth.

R Bismuthi subnitratis gr. vj.

Pulveris rhæi gr. iij.

Tragacanthæ ʒ ss.

Fiat pulvis; bis terve in die sumendus.

The nux vomica may be tried in doses of five or six grains. Eggs boiled hard, and eaten pretty freely, have put a stop to obstinate pyrosis.

GENUS LVII. COLIC. (*Colica.*)

Abdominal pain, with a sense of twisting, especially about the navel; vomiting; constipated bowel. It is produced, first by spasm, second, by the poison of lead, in which case we have what is called the painter's colic, marked by a gradual accession of the severer symptoms, with pains in the arms and back, the arms eventually becoming paralyzed; third, by protracted costiveness; fourth, by acrid ingesta; fifth, by retention of the meconium in infants; sixth, by stricture in some part of the intestinal canal, occasioning windy collections and eructations; and seventh, by calculous concretions in the bowels.

Diagnosis. — From enteritis, by the absence of pyrexia,

by pressure in inflammation increasing, while in colicky spasm it sometimes diminishes pain. (See *Enteritis*.)

Treatment.—To be directed, of course, to its exciting cause. (See above.) Sometimes it is necessary to have immediate recourse to powerful antispasmodics, whatever shall have been the cause of the disorder. Warm fomentations are always admissible, and for the most part, conspicuously serviceable: the warm-bath; and when we wish for evacuations, and fail in producing them, dashing cold water upon the legs and abdomen, or causing the patient to stand with his naked feet on cold marble, will sometimes relax the spasm which thus obstinately retains the fæces. Give the croton oil, in doses of two or three drops, when common purgatives fail; rub the abdomen all over with castor oil; give large doses of castor oil internally, when the stomach will bear it. This last is especially applicable in the colica pictonum, which requires also small doses of calomel and opium combined, given for some time.

Rx Opii pulveris.

Hydrargyri submuriatis ʒʒ gr. ss.

Confectionis aromaticæ q. s.

Fiat pilula; ter in die sumenda.

Warm bathing is exceedingly useful in colica pictonum; and, in its chronic state, when little besides the paralysis of the arms remains the use of the Bath waters, I have often observed, of unequivocal efficacy.

In all cases of colic we should carefully watch the coming on of inflammatory symptoms; and it is partly because inflammation is so easily induced, that we must, while using our antispasmodics freely, take especial care that we do not lock up fæcal, or calculous, or any other

matter in the intestinal passages. The opiate confection is one of the best forms of administering opium in colicky pains; it is not so constringing as other preparations of this medicine, and its constipating tendency may be guarded against by tincture of rhubarb.

R Confectionis opii ℥j.

Tincturæ rhæi f. ʒ iij.

Aquæ menthæ piperitæ f ʒ iss.

Fiat haustus.

I should like to see the opiate confection in more frequent use than I find it to be in the general practice of medicine.

GENUS LVIII. CHOLERA.

Simultaneous vomiting and purging of bile, with anxiety, griping pains, and spasms of the legs.

Symptoms. — Cholera is often attended by very urgent circumstances; the anxiety mentioned in the definition is extremely great; the leg-spasms, and, indeed, general convulsions, urgent; the pulse rapid and small; and, unless art intervene to save the patient, death sometimes takes place in not many hours from the attack.

Causes. — Acrid and indigestible food, or an overflow and acrid condition of the bile, from autumnal heats and colds. The autumnal fruits may occasionally assist in producing cholera; but it is, I believe, more referrible in the general way to atmospheric sources.

Prognosis. — In the general, favourable; when life is terminated by the violence of the disorder, the fatal event is usually speedy; cold clammy sweats take place; the abdomen becomes tense; the leg-spasms exceedingly urgent, and the patient's powers are exhausted with the utmost rapidity.

Treatment.—The object is to allay irritation as speedily as possible, and correct the morbid condition of the biliary organs. Copious diluent drinks may be taken, such as barley-water, linseed-tea, weak chicken-broth, rice-gruel, or merely toast and water. Enteritis should be guarded against by warm fomentations to the abdomen and to the feet; and opium is to be administered freely; it will often be found serviceable to combine one grain of calomel with one grain of opium, into the form of a pill, by which the opium will be made to sit easier on the irritated stomach; and by which erythematic inflammation, from the acrimony of the bile and general commotion, will be more readily prevented. Five grains of blue pill with the same intention will be found a good remedy in cholera. The opiate confection, in combination with rhubarb, forms an excellent medicine, (see page 289.) in cholera, where the stomach is capable of receiving any thing. When its irritability is too great, opium must be administered in glysters.

R Tincturæ opii f ʒj.

Mucilaginis amyli f ʒ xij.

Fiat enema.

The application of a blister, either to the back or to the epigastrium, will occasionally prove signally efficacious in checking sickness. When the violence of the disorder shall have given way, nothing but weakness remaining, bitter infusions will be found of use in assisting to restore the tone of the stomach and bowels.

R Tincturæ cardamomi f ʒ ij.

Infusi calumbæ f ʒ iss.

Fiat haustus.

Cholera sometimes, in the intertropical climates, as-

sumes a form of tremendous severity, and life is only preserved by the most prompt and vigorous measures. Bleeding is instituted, and calomel given in these cases to an extent and with a rapidity that we, in these latitudes, know nothing of; and these large and decided measures are not without abundant success. (See a masterly account of the *Indian Cholera*, in Dr. Good's *Study of Medicine*.)

GENUS LIX. DIARRHŒA.

Frequent purging; the disease not contagious, nor having any preceding pyrexia.

Causes. — Diarrhœa in some cases is a minor cholera, and is produced by superabundant secretion, or acrimonious quality of the bile; or it may take place merely from indigestion; or from cold applied irregularly or unduly to the surface; or from mental agitation; or from an erythematic inflammation in the villous coat of the bowels; (which last, by the way, is a very common source of the disorder); or there may be merely an increased action in the mucous follicles without inflammation; or acidity may be generated in the stomach, and getting into the bowels, may produce the looseness; this last being a common circumstance in the diarrhœa of children from dentition. Sometimes a loose state of bowel is produced by a deficiency of bile; and, in a word, every thing which deranges the order, or destroys the balance of animal movements, will prove, under disposing circumstances, productive of the complaint in question.

Diagnosis. — From cholera, diarrhœa is to be distinguished by the less severity of the symptoms, and the absence of vomiting; from dysentery, by the absence of tenesmus and scybalous, and sanious discharges.

Treatment. — According to the causes (see above) it

will be obvious enough that these must be removed before the disease can be expected kindly to yield. In the diarrhœa of indigestion, an emetic of ipecacuan will often be found very useful; if the liver is at fault, five grains of blue pill may be given with advantage, while you are administering astringents; if cold has produced the disorder, warmth to the surface is especially requisite; if from the pain, and red appearance of the tongue, and tendency to apthous manifestation, you have reason to suspect an erythema of the bowels, small doses of ealomel and opium, fomentations to the bowels, soothing mucilaginous medicinals, as the acacia mucilage, with small doses of ipecacuan, will be demanded.

R Pulveris ipecacuanhæ compositæ gr. v.

Pilulæ hydrargyri gr. iij.

Fiant pilulæ duæ ope mucilaginis acaciæ; bis terve in die sumendæ: or the pills of hyoscyamus, &c. before repeatedly recommended. (See page 187.)

If acidity prevails, the *mistura cretæ* of the Pharmacopœia, forms an excellent medicine; and with it may be combined the opiate confection.

R Confectionis opii gr. xv.

Misturæ cretæ f ʒ iss.

Tincturæ catechu f ʒj.

Fiat haustus.

In the diarrhœa of children from dentition, it is right to give ealomel or castor oil preceding to or in alternation with the cretaceous mixture; small doses also of tincture of rhubarb will form a good ingredient in the cretaceous draught.

Of astringents, the catechu and the kino are the best.

R Tincturæ kino ꝑj.
Mucilaginis acaciæ ꝑij.
Aquæ cinnamomi ꝑij.

Fiat haustus.

In protracted cases of bowel disorder, the liquor calcis in doses of two or three ounces, with the same quantity of milk, may be taken twice a day with advantage; and the habit of looseness which refuses to yield to astringents, and opiates, and cordials, will yield to an active emetic as to a charm, provided there be nothing of inflammation, or obstruction, or schirrous, to complicate and keep up the disorder.

In these last cases, when, with deobstruents and anodynes, astringents are likewise required, the infusum sinaroubæ, in doses of two fluid ounces, will be found a useful medicine. Equable warmth to the whole surface of the body is an indispensable matter in the treatment of all kinds of bowel complaints; and the application of the tartarite of antimony ointment with opium, (see p. 175.) to the epigastrium, may be had recourse to with advantage in some chronic irritations of the intestines, as it will produce a cutaneous and vicarious irritation.

GENUS LX. DIABETES.

An inordinate flow of urine, for the most part preternatural in respect of its quality, continuing for a length of time.

The species are the sweet, and the insipid diabetes; the first being characterized by urine of an odour, colour, and taste like honey. In the second, the urine being limpid, and not sweet.

Symptoms.—The diabetic patient has always a harsh dry skin, great emaciation attends the disease, with a con-

tinued thirst; there is also frequently a voracious appetite; and a degree of irritation, sometimes of excoriation, exists at the extremity of the penis; the legs often become œdematous, and the attendant fever assumes a hectic character.

Causes.—Constitutional weakness and premature age predispose to diabetes; it is often brought on by hard living, and the use at the same time of spirituous liquors in immoderate quantities. Too much of farina, as of oats, will tend to its induction; it is more frequent in Scotland than in England. Occasionally, it has immediately been produced by cold, and suppressed perspiration; and often its occurrence is without manifest cause. The malady itself appears to consist of deranged action, both in the chylopoietic organs and kidneys; but which are primarily and more essentially affected, does not seem to have been satisfactorily ascertained.

Prognosis. — Always fearful; it is indeed questionable, whether a confirmed and long existing diabetes has ever been cured.

Treatment.—The indications are, to correct deranged action in the chylopoietic organs, and alter the secretory state of the kidneys. A diet is enjoined, consisting entirely of animal food; alkalies are administered; the sulphuret of potass and the hepatized ammonia have been employed. Tincture of cantharides, uva ursi, alum, opium, the mineral acids, chalybeates, sulphureous waters, as of Harrowgate; the copaiba and other balsams; successive blisters to the region of the kidneys; and, lastly, large and repeated bleedings; these, and indeed various other remedies, have all been tried in succession; many of them in combination, and most of them with apparent and temporary; but I am afraid none with radical and permanent benefit, unless had recourse to in very early stages of the

disorder. We are not, however, to abandon the diabetic subject to his fate, but try, according to circumstances, the reputed medicinals. Warm clothing, and change of climate, I hold to be promising ingredients in the curative trials; uva ursi is a good astringent in diabetes.

GENUS LXI. HYSTERICS. (*Hysteria*.)

Rumbling of the bowels, a perception as if of a ball rolling about in the abdomen, and ascending to the stomach and fauces; these occasioning a sense of strangulation; sopor; convulsions, a profuse discharge of limpid urine; the mind changeable, and not under the controul of the will.

Symptoms. — Hysterical affection brings with it a cohort of symptoms; the main ones are, however, marked in the definition; there is often a sense of oppression about the chest, as well as the suffocative feel above described; great disposition to laughing and crying alternately, and without obvious cause; fluttering and palpitation, with urgent flatulence, and cold extremities, are also characteristic symptoms of hysteria. When the patient comes to herself, (for this is a disease affecting females by far the most frequently,) there is often no recollection of what took place in the paroxysm.

Causes. — Mobility in the nervous frame is the great source of hysteria; and its excitants are internal or external; the former consisting in circumstances connected with sexual peculiarities, or of irritations in the stomach and bowels; the latter being constituted of mental emotion, or of sympathies; or of crowded and heated apartments; or of irregular hours; or of too full, or too spare a diet.

Diagnosis. — The leading features of hysteria are, the globus hystericus, and profuse discharge of pale urine; while in epilepsy, which hysteria sometimes simulates, you have the foaming at the mouth and convulsions, as distinguishing characters.

Prognosis. — Favourable, unless where there are indices of the disorder depending upon organic conditions of the brain; when it depends merely upon nervous mobility it usually yields to time and treatment.

Treatment. — According to the exciting cause; always recollecting that the fully marked disorder is occasionally and not seldom symptomatic of stomach and bowel irritation, and of worms; if that be the case, vermifuges are the obvious remedies, (see *Worms*.) When the disorder originates in mere nervous irritability, pretty strong antispasmodics seem called for, such as æther and ammonia; with one or the other of which, the temples may be rubbed, or application made to the nose during the insensibility of the fit. Dashing cold water on the face is sometimes useful; when there are marks of much plethoric fulness, with a tendency to phrenitis, pretty free bleeding must be resorted to. In all cases, it is expedient that the air of the apartment be kept cool and pure, and crowding about the sick, which is so common in these cases, ought to be forbidden. During the intervals of the fits, tonics are employed with advantage, care being taken to keep the secretions in proper order; indeed, it will be necessary, while tonics are used, to give at the same time aperients.

R Decocti aloes compositi f ʒ ss.

Infusi cascarillæ f ʒ iss.

Fiat haustus.

Of the nervous medicines, as they are termed, I look upon valerian to be one of the most efficacious; and much benefit is often derived from simply giving a tea-spoonful of the ammoniated tincture of valerian, two or three times a day, in a glass of water, or of infusion of the root, in the proportion of half an ounce to a pint of boiling water.

Cold, and sea-bathing, and occasionally chalybeates, are useful in cases of nervous mobility, connected with weakness. When chalybeates are employed in these cases, I think the best form the ferrum ammoniatum; it may be given in the tincture by half drachm doses, or in the form of pills combined, as in the following formula:

R Ferri ammoniati ℥ ij.

Pilulæ galbani compositæ ʒ ij.

Fiat massa; in pilulas xxxij. dividenda; quarum sumat ægrotans bis in die.

In the dyspeptic and cardialgic affections connected with hysterica, the combination of magnesia and ammonia will often be found of abundant efficacy.

R Magnesiae subcarbonatis ℥ j.

Spiritus ammoniæ aromatici f ʒ j.

Aquæ pulegii f ʒ iss.

Fiat haustus.

The nitrate of silver, and the sulphate or oxide of zinc, may be given as in other disorders of the nervous system; but in the general way, it will not be found necessary to resort to these more powerful tonics, when the disorder is merely hysteric.

GENUS LXII. HYDROPHOBIA.

Horror of liquids, in consequence of an attempt to swallow them exciting painful convulsions of the pharynx; the disorder generally proceeding from the bite of a rabid animal.

A desire for biting, which Dr. Cullen makes a prominent symptom in one of the species, is by no means a necessary consequence of having been bitten by a mad animal.

The symptoms are somewhat similar to those of other spasmodic affections of a violent kind, while the pharyngeal convulsion from liquid, is a peculiar and characteristic token; this, however, is erroneously described as a dread of water, for the patient, on the contrary, will often make frequent unsuccessful attempts at swallowing, and, while reason remains, will be exceedingly reluctant to admit his incapacity for swallowing. The time of the disorder's attack after the injury is exceedingly uncertain, and most probably depends upon constitutional and accidental circumstances. When the symptoms occur, life is often terminated in the course of eight-and-forty hours.

Treatment.—All attempts at cure seem hitherto to have proved unavailing. If any thing promises to remove this dreadful affection, it is the excitation of a violent action in the system. A concealed medicine in Hertfordshire, or Bedfordshire, is employed, and, according to the reports of some accredited practitioners, with success. It is supposed to be a very large dose of the meadow saffron. Immediate excision of the bitten part is effectual; and it is said, that a tight ligature immediately made upon the limb, between the bitten portion and the brain, will prevent the disorder from taking place.

ORDER IV. MENTAL DISEASES. (*Vesaniæ.*)

Lesion of the mental faculties of judgment without pyrexia or coma.

GENUS LXIII. IDEOCY. (*Amentia.*)

Imbecility of mind, preventing either perception or memory of the relations of things.

The species being,

I. Congenital.

II. From old age.

III. Occasioned by external causes.

GENUS LXIV. MELANCHOLY. (*Melancholia.*)

Partial insanity without dyspepsia.

GENUS LXV. MADNESS. (*Mania.*)

Universal insanity.

Being altogether mental; or evidently corporeal; or obscure; that is, not clearly traceable either to affection of the mind, or to bodily disorder.

GENUS LXVI. NIGHT-MARE. (*Oncirodynia.*)

Imagination unduly or disagreeably excited during sleep.

This is active, in which case the subject of it is incited to walk, and use other motions; or oppressive, (*gravans*), causing a sensation of weight, upon the breast especially.

Remarks.—Although there is a class of disorders which always have been, and which ever must be regarded in a certain sense, mental; it must be recollected that these are, in fact, as purely affections of some part of the corpo-

real frame as any other ; the difference consisting in this, that delusion, with more or less decision, invariably characterizes vesanic ailment, (see Part I. p. 72.); while in other derangements, even in those that implicate the nervous organization and function, due conception remains if perception continues ; and it is only as this last power is interfered with, that the thoughts and judgment become erroneous. Madness and melancholy, I have before said, (Part I. p. 75.) are improperly divided by Dr. Cullen, since they are merely accidental or constitutional modifications of the same disorder ; it must, however, be admitted, that from first to last, the mental delusion will sometimes maintain a melancholic hue, while, at other times, a sort of joyous excitement runs through the whole course of the derangement.

The symptoms of melancholy are too commonly known to require statement ; its causes also are generally obvious ; they are anxiety, grief, disappointed love, or ambition ; intemperance. The distinction of the nosologist from dyspepsia and hypochondriasis, is taken from there not being necessarily any stomach derangement, combined with and causing the melancholy feelings.

Prognosis. — Favourable, if the disease be not deeply rooted ; if it arises from evident causes, that are only of temporary and partial operation ; and if there be a tendency manifested to obviously bodily disease, as cutaneous eruption. The unfavourable circumstances are, the disorder occurring as an hereditary affection ; having not been traceable to any external cause ; having continued for more than a year ; and showing no disposition to bodily ailment. If madness of any kind, whether more maniacal or more melancholic, supervene upon epilepsy or paralysis, the prognosis is unfavourable.

Treatment. — The melancholic must often be cheated

into excitement; drawn in despite of himself among scenes of amusement; and thus be furnished with the chance of the insane idea being expelled from his breast. But you must not treat as ideal and fanciful what he deems substantial and real; and, indeed, what to him actually is so. It is allowed on all hands, that the physician best succeeds in managing the melancholic, who unites firmness of character with mildness of deportment, and nicety of taste and tact; for although the deranged individual will, and must submit to be directed and controuled, he soon, and justly, takes fire at his being treated like a child; a mistake in management which too many are apt to make, and by which the force of the disorder is often increased.

Although melancholia is often present without the presence of obviously bodily derangement, it will generally be found expedient to keep a gentle action upon the secretions. Small doses of mercurials, with the compound decoction of aloes, will at times prove beneficial; tonics, too, may occasionally prove serviceable, such as the liquor arsenicalis; valerian, I have before said, seems to show occasionally some sort of specific agency upon the nerves. (See page 297.) Cold and warm bathing, and the internal and external use of salt water. These and other expedients may be tried according to circumstances, before we abandon the victim of despondency to his sad fate. Perhaps, if there be any one thing more likely to accomplish our object than another, it is the administration of deobstruent purgatives for some length of time.

Symptoms of Mania.—The coming on of this disorder is well described by Haslam. Insane patients first become uneasy and incapable of confining their attention; they neglect their accustomed employment; they get but little sleep; they are loquacious and positive; they soon after this become divested of restraint; impatient of con-

tradition; quarrelsome; have the appearance of intoxicated persons; at length suspicion creeps into the mind, "they are aware of plots which had never been contrived, and detect motives which were never entertained." Finally, the succession of ideas becomes too rapid for examination; and the mind becomes a chaos of thoughts and perceptions.

Causes.—Pretty nearly the same as in melancholia, operating upon different states of the system, or different constitutional bias. Any immoderate indulgence, whether of passion or of sense, will lead to maniacal disorder. Abstruse study often "wears a channel in the brain, through which imagination rushes and bears down all before it."

Diagnosis.—From phrenitis, by the absence of pyrexia corresponding to the prevailing excitement. (See page 166.)

Prognosis.—The more favourable, the more it is connected with other diseases, excepting palsy and epilepsy. When the disease shall have lasted more than a year, the hope of recovery is much less than before.

Treatment.—Bleeding is occasionally requisite, but the distinction between phrenitic and maniacal excitement ought ever to be kept in view. Purging will often be found useful; repeated emetics, especially of copper and zinc, are recommended by some. In the general way, however, it may be said, that insanity does not admit of any specific treatment beyond that of watching occasional symptoms of a corporeal kind, and keeping them under; exciting and regulating the secretions when they may fall into a torpid or irregular state; administering narcotics, of which one of the most efficacious is digitalis, when vascular shall attend upon mental excitement; and carefully adapting the mental treatment to the disposition

and former habits of the patient. Pleasing occupation is a great matter; and if the exercise be somewhat hard (so as it is not irksome), so much the better, for keeping the surface in an open state may prove of much benefit. Placing the patient in a hot-bath, and applying at the same time cold water to the head, is an expedient as old as Celsus. This practice has lately been revived by empirics, and talked of as a secret measure of unbounded utility.

Although insanity, as I have said, admits of no specific remedy, its management ought always to be in medical hands, since the combating of constitutional ailments, with which its manifestation may connect itself, is not seldom the curing of the disease.

Night-mare.—This disease need not be described beyond the definition; it appears to be one of the forms in which dyspepsia makes its appearance; and is supposed to be constituted in part of a sympathetic spasm of the diaphragm and thoracic muscles. It probably has some connection with the state at the time of cerebral circulation. It is apt to recur from habit, when once it may have visited a patient.

Its remedies are those which apply to dyspepsia. Flatulent distending food, particularly late in the evening, should of course be avoided. Tonics and antacids, taken according to circumstances, should be had recourse to; cheerful trains of thought encouraged, and the bowels preserved from falling into a state of constipation. Lying with the head raised high on the pillow, will prove exceedingly preventive of the attacks; and the apartment in which the subject of incubus sleeps, ought to be cool and airy.

AUTHORS ON ADYNAMIC, SPASMODIC, AND VESANIC
DISORDERS.

Abernethy, on the Digestive Organs; *Arnold*, on Insanity; *Battie*, on Madness; *Bree*, on Disordered Respiration; *Burrows*' Enquiry on Insanity; *Cox*, on Insanity; *Crichton*, on Mental Derangement; *Crowther*, on Insanity; *Gillman*, on the Bite of a rabid Animal; *Hall*, on the Mimoses; *Halloran*, on Insanity; *Hamilton*, on Purgative Medicines; *Haslam*, on Insanity; *Hill*, on Insanity; *Latham*, on Diabetes; *Moseley*, on Canine Madness; *Moscley*, on Tropical Diseases (*Tetanus*); *Parry*'s Cases of Tetanus, &c.; *Priehard*, on Nervous Diseases; *Pinel*, on Insanity, by Davis; *Rollo*, on Diabetes; *Spurzheim*, on Insanity; *Waller*, on Incubus; *Watt*, on Diabetes; *Watt*, on Pertussis; *Whytt*, on Nervous Diseases; *Willis* (Dr. F.), on Mental Derangement; *Wilson* (*Philip*), on Indigestion; *Yeats*, on the Duodenum.

CLASS III. CACHEXY.

(See Part I. p. 84.)

Depraved condition of the whole, or of the greater part of the body, without primary pyrexia or neurosis.

ORDER I. WASTING.

Emaciation of the whole body.

GENUS LXVII. TABID DISORDER.

Emaciation, weakness, and hectic fever.

GENUS LXVIII. ATROPHY.

Emaciation and weakness, without hectic. For the difference between tabes and atrophy, see Part I. p. 84.

When the falling away in flesh and strength is connected with a disordered condition of the nervous and muscular energy, those plans of treatment are required which give tone and vigour to these parts of the frame; such as, the vegetable bitters; the various barks; and the metallic tonics. When the complaint is rather tabid than atrophic, and the lacteal system is especially implicated, medicinals are called for, which stimulate this portion of the system. For the tabes mesenterica of infants I have found nothing better, in the general way, than the hydrargyrus cum creta of the Pharmacopœia, with very small doses of digitalis. This combination of medicinals seems to be deobstruent and excitative of the lymphatic and lacteal vessels; and in more advanced life, when nutrition seems impeded in consequence of defective action in the mesenteric absorbents, still will, in general, prove one of the best stimulants. It will, for the most part I think, be found, that steel is rather applicable to the tabid state, and other tonics to atrophia.

ORDER II. SWELLINGS.

Tumefaction of the whole, or greater part of the body's surface.

I. Adipose.

GENUS LXIX. CORPULENCY.

Troublesome enlargement of the body from fat.

II. Flatulent.

GENUS LXX. PNEUMATIC SWELLING.

Tense, elastic, and erepitating intumescence of the body.

GENUS LXXI. TYMPANITIC, OR DRUMMY SWELLING.

A tense enlargement of the abdomen, elastic, and sonorous; constipation of bowel; wasting of the other parts of the body.

GENUS LXXII. UTERINE INFLATION. (*Physometra*.)

Slight elastic swelling in the epigastrium, seemingly in form and situation referrible to the womb.

Corpulency needs no description; its obvious remedy is to lessen the ingesta, and increase the absorbent energy, which is best done by exercise. Emphysematic, or windy swelling, is occasioned by a collection of air in the cellular membrane; it is attended, as the definition states, with a crepitating or creaking noise, and occasionally spreads over the greater part of the body. It is sometimes produced by wounds in the lungs, sometimes arises spontaneously, or without any manifest cause, and occasionally occurs in an inexplicable manner, from certain kinds of food that prove poisonous. When the collection of air is excessive, so as to prove troublesome, and happens in the thorax so as to impede breathing, scarifications of the cellular membrane will be found necessary. In all cases, the occasional cause is of course to be sought for, and if possible subdued.

Of the drum-belly, as it is called, there are two species; the one abdominal, occasioned by a collection of air in the peritonæal cavity; the other intestinal, formed by air in the cavity of the intestines. In the former the swelling is more diffused and equal than in the latter, and there is not

that emission of flatus, which attends the intestinal tympanites. The continuance of either tends to dropsical effusion; indeed tympanites and ascites are not unfrequently combined; and they seem occasionally to alternate with each other. At this time I am attending a patient, whose abdomen on one day or week seems distended with flatus, on another there are complete indications of watery collection.

Causes.—Debility in the absorbent or exhalent systems; intemperance, or low living; distending the stomach with tea, in place of taking more wholesome and substantial nutriment. Sometimes the suppression of ordinary evacuations will occasion tympanitic enlargement. Mental anxiety will produce it.

Diagnosis.—From dropsy, tympanitis is distinguished by there being in the latter no fluctuation, while the former is without crepitus. There is not, necessarily, in mere tympanites œdematous swellings of the ancles, nor paucity of urine.

Prognosis.—Obstinate cases of abdominal tympanites often prove fatal. The intestinal is of a more fugacious and symptomatic kind, and is remediable by the removal of the causes upon which it has depended.

Treatment.—Expulsion of the wind in the first instance, and restoration of tone in the second, are the indications of treatment. Carminatives are required to fulfil the former, tonics are demanded to effect the latter.

R Spiritus ætheris nitrici.

———— sulphurici.

———— ammoniæ aromaticæ aa f ʒ ss.

Aquæ menthæ piperitæ f ʒ iss.

Fiat haustus.

℞ Decocti aloes compositi.

Infusi cascarillæ āā f ʒvj.

Fiat haustus.

℞ Pulveris aloes compositi.

—— cinnamomi compositi āā gr. viij.

Olei carui ℥ ij.

Mucilaginis acaciæ q.s.

Fiant pilulæ iv. ; bis terve in die sumendæ.

Warm plasters, as the cumin and compound galbanum plaster, may be laid on the abdomen with advantage; the abdomen, too, may be bandaged; if the species be abdominal, and not intestinal, puncturing may be had recourse to.

In order to restore tone, the barks, especially cascarilla, are indicated, or other tonics; while during their use, as well as during the employment of warm purgatives, all flatulent articles of diet must be carefully abstained from, more especially the legumina — beans and peas.

Uterine inflation we cannot suppose to take place to any extent, unless there be some vaginal obstruction to the passage of the air. It seems, however, to be an admitted fact, that air does occasionally collect in the womb, and discharge itself from the vagina in considerable quantities, and considerably to the annoyance of the patient.

III. Aqueous Collections. (*Dropsies.*)

GENUS LXXIII. DROPSY OF THE FLESH. (*Anasarca.*)

A soft inelastic swelling of the whole, or part of the body. (See for rationale of Dropsy, Part I. p. 88.)

Symptoms. — Anasarcous swellings usually make their first appearance about the ancles; they gradually rise; affect the legs and thighs, and ultimately the whole body;

the internal cellular membrane comes in the course of time to partake of the affection, and visceral interruptions, especially impediments to the lungs' actions, become conspicuous. The skin is usually pale and doughy; the urine in small quantities, but sometimes the reverse, and very pale; the fluid at length oozes out of the skin, and sometimes where this takes place, there is an erythematic inflammation; so that anasarca and erysipelas become nearly allied. The attendant fever is of a hectic type. (See Part I. p. 89.)

Diagnosis. (See *Tympanites*.)

Prognosis.—When the effusion is the result of mere debility, and unconnected with visceral disease, the prognosis may be considered rather favourable. When, on the contrary, much organic affection is present, when the accompanying emaciation is considerable, and the tendency great to erysipelas, an unfavourable opinion is to be formed respecting the disorder's event. Drowsiness or torpor is likewise an unfavourable symptom, as is a continued celerity of pulse.

Treatment.—The obvious indications are, to draw off the effused fluid, and prevent its reaccumulating. Puncturing or scarification of the skin, or what is better, perhaps, than either, acu-puncturing, or the insertion of several small needles into the skin, may be had recourse to. Blisters, too, are sometimes expedient, but we should be careful of too freely applying these, lest we produce a sloughing sore; and with respect to internal medicines, they are to consist, variously combined and alternated, of cathartics, diuretics, diaphoretics, and emetics. Of the cathartics, one of the most efficacious is the elaterium, which should be given in half grain doses, and repeated frequently, according to its effect. It may be combined

with other purgatives, or given alone. Jalap, too, and colocynth are good purgatives in hydropic cases.

R Pulveris jalapæ ʒ ss.

———— zingiberis ʒ ss.

Olei juniperi ʒ j.

Fiat pulvis ; quotidie, mane sumendus.

R Extracti colocynthidis compositi ʒ j.

Olei juniperi ʒ vj.

Fiant pilulæ xij. ; quarum sumat æger ij. nocte manèque.

For other formulæ of purgatives and diuretics, and diaphoretics, (see page 154. et seq.)

The squill and colchicum, and digitalis, are, however, especially applicable as diuretics in most cases of hydropic collections of the cellular membrane.

R Pulveris digitalis.

———— scillæ āā gr. j.

Potassæ supertartratis ʒ iss.

Fiat pulvis ; ter quaterve in die sumendus.

R Infusi digitalis f ʒ vj.

Vini colchici f ʒ ss.

Spiritus juniperi compositi f ʒ j.

Aquæ puræ f ʒ j.

Fiat haustus.

In cases of much asthenia, and where the urine is rather pale and scrous than high-coloured, the cantharis will be often found an useful adjunct to other diuretics.

R Tincturæ cantharidis ʒ xxv.

———— scillæ ʒ xij.

Spiritus ætheris nitrici f ʒ j.

Infusi cascarillæ f ʒ iss.

Small doses of mercurials, as of the blue pill or submuriate of mercury, may be added to other diuretics when we suspect visceral congestions.

R Pilulæ scillæ compositæ ʒ iss.

———— hydrargyri gr. xxij.

Fiat massa; in pilulas xxij. dividenda; dosis pilulæ ij., vel iij. nocte manèque.

The genista, lactuca virosa, armoracia, and tabacum, are used by some practitioners as diuretics in dropsy.

In order to prevent the reaccumulation of the effused fluid, which is by far the most difficult part of the curative plan, tonic medicinals, and nutritious diet, and moderate exercise, and frictions, and bandages of the limbs, must be resorted to. It is necessary and proper, indeed, in cases of pure anasarca, unaccompanied with visceral infarctions, or inflammatory conditions, to employ these, while we are endeavouring to evacuate the water by more immediate or direct means. For kinds of tonics, see under *Dyspepsia*, p. 270. The tinctura ferri muriatis, in doses of about fifteen minims, combined with a drachm or more of the sulphas magnesiæ, will often prove very useful in anasarcaous affections.

GENUS LXXIV. DROPSY OF THE BRAIN. (*Hydrocephalus*.)

Soft inelastic enlargement of the head, with a separation of the cranial sutures.

The above is the hydrocephalus chronicus, or externus of some others; improperly, however, named external, since it is only distinctively so in its outward showing, and the fluid is found as well in the ventricles as among the membranes and substance of the brain; it is a congenital disease; it prevents the process of ossification from being duly performed, and hence the separation of the cranial

bones at the sutures; it is very little under the influence of medical treatment. Though some authors have talked of its cure, by giving, for a great length of time, a grain of calomel every night; and others have recently proposed and performed the operation of puncturing the head at one of the divisions, letting out gradually the contained fluid, and obviating its reaccumulation by a bandage so contrived as to keep up a constant and equable pressure upon the whole surface of the cranium. This disorder will sometimes be cured spontaneously, as if by an effort of nature; but it is far the most irremediable, either by nature or art; and life is terminated, after the individual shall have existed in a condition of semi-vitality for one, two, three, four, five, or more years. Occasionally, ossification of the skull will take place without the fluid being absorbed, and then the individual who is the subject of the disorder, may live a long time with a large head and little intellect.

GENUS LXXV. BIFID SPINE. (*Hydrorachitis*.)

A soft small tumour on the lumbar vertebræ, the vertebræ separating.

In this case the swelling on the vertebræ is connected with defective ossification of the parts, as in congenital hydrocephalus; it is usually a fatal affection; but both puncture and pressure, as in chronic hydrocephalus, have occasionally proved of much service; it is a complaint generally put into the hands of the surgeon, and, therefore, not much treated of by medical writers.

GENUS LXXVI. DROPSY OF THE CHEST. (*Hydrothorax*.)

Difficulty of breathing; paleness of countenance; œdematous swelling of the feet; difficulty in lying down;

sudden and spontaneous waking out of sleep, with palpitation; fluctuation of water in the breast.

The collection of serous fluid in the chest, by which hydrothorax is constituted, may be either in the cavity of the pleura, or in the cavity of the pericardium, or in the cellular substance of the lungs; and thus, severally forming the hydrops thoracis, the hydrops pericardii, and the hydrops pulmonum of authors; very frequently, however, these disorders are all co-existent.

The *symptoms* are well marked in the definition; there is, however, for the most part, a paucity and paleness of urine; a great irregularity, amounting often to intermission of the pulse; a numbness of one or other arm, or of both arms, when the collection of fluid is in both cavities of the thorax. Sometimes the patient finds the difficulty of breathing upon lying down come upon him immediately upon his attempting the recumbent position; at other times the occurrence of the dyspnœa is more gradual; and in this last case it may be inferred, that the effusion is rather into the cellular membrane, than the pleuric cavity. In other cases, the palpitation of the heart is more than ordinarily urgent, and the radial pulsations more than usually intermittent; and then we have to suspect that the pericardial cavity is the main seat of the disorder.

Causes. — Whatever produces inflammation or congestion of the pulmonary vessels is likely to be eventually productive of hydrothorax. (See page 183. and 282.). Hydrothorax is very often symptomatic of cardiac, of pulmonary, of hepatic, and, indeed, other visceral disease; and it is brought on by the interruptions to pulmonary regularity of function, which these visceral disorders suppose.

Diagnosis. — From asthma, or mere dyspnœa, hydrothorax is distinguishable by its more permanent characters, and by the accompanying dropsical affections and tendencies. It is not often, however, that fluctuation can be perceived in the way mentioned in the definition. When that is the case, the collected fluid is generally purulent, and constitutes the disorder named by systematics empyema.

Prognosis. — Unfavourable, especially when much organic disease accompanies the complaint; or when it has been induced in a chronic, insidious manner. The young practitioner should recollect, that death in hydrothorax is often instantaneous, and prognosticate accordingly.

Treatment. — As elaterium seems most adapted in the general way for anasarca and ascites, so do digitalis and squills appear to be especially applicable to the demands of hydrothorax.

R Pulveris digitalis.

——— scillæ āā gr. xv.

Camphoræ ʒj.

Olei juniperi ℥ vij.

Mucilaginis acaciæ q.s.

Fiat massa; in pilulas triginta dividenda; sumat æger duas pro dose.

For other formulæ of diuretics and purgatives, see Anasarca and Ascites.

Blisters to the chest will be found occasionally useful in hydrothorax; as will sometimes the tartrate of antimony ointment. (See page 175.). One of the best tonics in hydrothorax is cascarilla, as this bark possesses an expectorant power.

Paracentesis of the thorax has been tried, but, in the general way, it is of less promise as a permanent, or even temporary remedy, than in empyema. (See p. 184.)

GENUS LXXVII. DROPSY OF THE BELLY. (*Ascites*.)

Enlargement of the abdomen, scarcely elastic, but fluctuating.

The species are abdominal, in which the swelling is equally diffused over the whole of the abdomen, and the fluctuation sufficiently evident; and, 2d, encysted, with the enlargement, partial, at least, in the first instance; the fluctuation being less evident.

Symptoms.—In the first of these species, or peritonæal dropsy, the health is usually much impaired before the swelling takes place, the urine becomes scanty, the feet œdematous, the skin dry, the bowel costive, and eventually the breathing is oppressed and difficult; very often, indeed, hydrothorax accompanies ascites; but more usually the breathing is affected by the displacement of the abdominal viscera, pressing upwards upon the diaphragm.

Now in the encysted dropsy, the general health from the first is by no means, for the most part, so much impaired; and, as stated in the definition, the first showing of the disorder is usually on one side; and it is not until the complaint has lasted some time, that the whole abdomen comes to be enlarged.

Causes.—For the immediate causes of dropsy see Part I. p. 87. The exciting sources of abdominal dropsy are often deranged viscera, accompanied by general disorder in the lymphatic system; sometimes the effusion is consequent upon peritonæal inflammation, and in this case both it and the urinary secretion are higher in colour

than when the complaint is rather the result of schirrous liver, or pancreas, or spleen, or disordered mesenteric glands.

Diagnosis. — From tympanitic and physconic swelling, by the fluctuation of the tumor, by paucity of urine, and by the accompaniments of œdematous or anasarcaous affections; for the distinction between ascites and encysted dropsy (principally ovarian), see above in the statement of symptoms.

Prognosis. — Mostly unfavourable; more especially when there are marks present of visceral disorder; and when the constitution generally is in an impaired state.

Treatment. — The indications are obviously to discharge the fluid, and prevent its re-accumulation; and the remedies generally, are the same as recommended in anasarca. (See under *Anasarca*.). When the presence of visceral infarction, or schirrosity is suspected, mercury should be combined with the diuretics.

R̄ Pilulæ hydrargyri ʒj.

Pulveris scillæ ʒss.

Fiat massa; in pilulas xvij. dividenda; sumat ij. ter in die, superbibendo haustum sequentem:—

R̄ Spiritus ætheris nitrici f ʒj.

———— juniperi compositi f ʒ iss.

Fiat haustus.

Or apply ointment to the region of the liver, as directed in Hepatitis. (See p. 194.)

Parecentesis, or tapping, must be performed neither very late, nor very early in the disease; if too early, it may prove unnecessary, if very late it may tend to the production of peritonæal inflammation, and accelerate the fate of the patient.

Scarification, or acupuncturing, is advisable for the accompanying anasarca of the extremities, and this will sometimes lessen the abdominal collection.

GENUS LXXVIII. DROPSY OF THE WOMB. (*Hydrometra.*)

Hypogastric swelling, gradually increasing, and at length assuming the form of the uterus, fluctuating and yielding to pressure; not caused by suppression of urine, nor pregnancy.

I have already said, that the encysted dropsies which are met with are principally in or about the ovaria; and have before stated, that collections in the womb are not possible, without the formation of an adventitious membrane closing the os uteri.

These encysted dropsies are without radical cure.

GENUS LXXIX. DROPSY OF THE SCROTUM. (*Hydrocele.*)

A swelling of the scrotum, not painful, gradually forming, soft, fluctuating, and pellucid. A surgical disease.

SECT. IV. ENLARGEMENTS OF SOLID PARTS.

GENUS LXXX. PHYSCONY. (*Physconia.*)

A tumor occupying principally some portion of the abdomen; gradually increasing, but neither sonorous nor fluctuating.

Irremediable, excepting in its nascent state, you can excite the absorbent system by medicines which act especially on these parts; such as a combination of mercury and fox-glove. (See p. 87.)

GENUS LXXXI. RICKETS. (*Rachitis*.)

The head large, especially on the fore part, swollen or enlarged knees, flattened ribs, tumid abdomen, general emaciation. (See Part I. p. 89.)

Irregular formation of bony matter constitutes the essence of rickets, which is not so common a disorder as it was formerly, now that the management of infancy is more judicious. In ricketty children, the wrists and the ancles are the first to enlarge, and it will be almost always found that there is a degree of abdominal or mesenteric affection present. Dentition in these subjects is usually tardy, but often not so painful as in more healthy children. All the bones come sometimes to be eventually affected, and thus incurvations and deformities are engendered.

Causes. — What is called the scrophulous temperament constitutes the great source of ricketty affection. (See p. 85.) And this disposition is fostered by overfeeding, or too poor a diet; by confined air; want of good nursing; exposure to cold, especially damp, which last modification of cold seems to be an especial source of infantile ailment. Poverty, or any bad condition of the breast milk, will tend to the production of rickets.

Treatment. — The indication is by bracing the system, especially the lymphatic part of it, to promote due assimilation of the ingesta, and the consequent osseous formation.

Purgatives of the deobstruent kind are called for, that is, those which rouse the secreting and assimilating energy. The hydrargyrus cum creta of the Pharmacopœia is an excellent medicine; this, in combination with very small doses of powder of digitalis, should be given every night for some length of time; and the practitioner will often

be surprised at the beneficial effects of this combination. It will be necessary to interpose about twice a week a calomel purge in the morning.

R Hydrargyri cum creta gr. iij.

Pulveris digitalis gr. $\frac{1}{4}$.

Fiat pulvis ; omni nocte administrandus.

R Hydrargyri submuriatis gr. ij.

Pulveris jalapæ gr. iij.

——— zingiberis gr. j.

Fiat pulvis ; bis in septimane exhibendus.

With wholesome food, such as biscuit, good milk, arrow root, rusks, and rice : good nursing in the open dry air being at the same time enjoined ; the above medicinals will sometimes prove every thing that is wanting. When, however, by these means, the secretory and assimilating organs are got into a better state, chalybeate medicines may prove highly useful. Of these the vinum ferri ; the carbonas ferri ; and the tinctura ferri muriatis, are the best. The dose of the first to a young child, is half a drachm ; of the second, two or three grains, with an equal quantity of powdered rhubarb ; and of the third, four or five minims.

It is often proper to correct the acidities of the first passages, by small doses of soda, or potass, or magnesia ; but the phosphates of soda and lime, which were introduced into practice some time since, are of little avail.

The sulphate of quinine, in half grain, or grain doses, might be tried with a promise of advantage.

Cold and sea-bathing are efficacious, should the system not be too debile for their employment.

A small quantity (say half a glass) of good port wine,

will sometimes prove very serviceable to children that are rather more advanced, but who still show a ricketty tendency, by the ancle and wrist bones continuing to be enlarged unduly.

ORDER III. IMPETIGINOUS DISORDERS.

(*Impetigines.*)

Cachexy, deforming principally the skin and exterior parts.

GENUS LXXXII. SCROPHULA. (See Part I. p. 85. and 89.)

Tumors of the conglobate glands, especially those in the neck; swollen upper lip and nose; countenance florid; soft skin, and tumid abdomen.

Symptoms.— Besides those marked in the definition, there is, for the most part, a largeness of the eye, especially of its pupil, and there is a tendency manifested to ricketty irregularity in the bowels. Although the countenance is often florid, and the skin fair, and the eyes blue, you have often scrophula characterized by dark hair, and dark eyes. Scrophulous manifestations generally occur after the period of the first dentition. Scrophula, however, as I have before intimated, is rather the root of other diseases, than in itself a disorder.

Causes.— It is decidedly hereditary. Cold and humid, and variable climates produce it in greatest abundance; and all circumstances calculated to derange the system will bring the latent tendency into act. Damp situations, and too rich or too poor diet, will excite scrophulous derangements.

Treatment.— (See *Rickets*.) Bathing in the sea, and living by the sea side, have been thought, by some, specifics

in scrophula; but these expedients are only serviceable, inasmuch as they excite, and give tone to the system. Bark and steel are occasionally useful. The latter may be joined with the mineral acids.

R Tincturæ ferri muriatis.

Acidi sulphurici diluti āā f ʒss.

Fiant guttæ; sumat infans guttas decem ex pauxillo aquæ bis in die.

Or the ammoniated iron, or the carbonate of the same metal, three or four grains of the former, or four or five of the latter, may be given to a child four or five years old, with a grain or two of rhubarb added to each dose.

Respecting the specific virtues of muriate of barytes and lime, about which there was much talk some few years since, I am sceptical; their efficacy, if they have any, is resolvable into tonic agency, and corrective operation upon the first passages.

When, in after life, scrophulous appearances are complicated with syphilitic taints, the decoctum sarsaparillæ compositum may, perhaps, be administered with advantage; administering at the same time five grains of the pilulæ hydrargyri submuriatis compositæ, every night.

Soda may be employed, together with the conium and hyoscyamus, in the management of scrophulous disorders that consist at once of derangements in the stomach and bowels, and local affections.

R Sodæ subcarbonatis exsiccatae ʒj.

Extracti hyoscyami.

—— conii āā ʒss.

Pulveris rhæi gr. xv.

Mucilaginis acaciæ q. s.

Fiant pilulæ xxx. ; sumat ij. ter in die.

From ten grains to a scruple of the spongia usta are given in cases of glandular affections, made into a powder with sugar ; and iodine in different forms has recently been much lauded, especially in that enlargement of the thyroid gland, which constitutes bronchocele ; and which, perhaps, principally depends upon the same cause as the disorder of the lymphatic glands.

GENUS LXXXIII. SYPHILIS.

A contagious disorder after impure coitus, and disease of the genitals. Clusters of pimples appearing on the skin, principally about the margin of the hairs, which go off in crusts and ulcerous scurf ; pains and protuberances of the bones.

This is a disease usually placed under the care of the surgeon ; it is, probably, much modified in the present day from its former malignity, and thus more susceptible than formerly of radical cure, by the alterative treatment that is now pretty generally employed. It is possible, however, that the anti-mercurial feeling may be carried too far.

GENUS LXXXIV. SCURVY. (*Scorbutus.*)

(See Part I. p. 90.)

In cold climates, asthenic and stomach derangements, with varied-coloured spots on the skin, usually livid and breaking out about the roots of the hairs, these affections occurring after living on putrescent or salt meat, without a sufficient supply of vegetables.

True scurvy is so usually marked by depressed spirits and spongy bleeding gums, that these symptoms ought to have been put down in the definition ; the excretions, too, are exceedingly fœtid, and spontaneous hæmorrhages from the bowels, from the nose, and even from the ears and extremities of the fingers, are apt to occur.

Causes. — These are partly stated in the definition: deficient cleanliness; depressing passions; and sudden transitions from a hot to a cold climate, will, in combination or separately, be productive of scurvy.

Diagnosis. — The purpurea hæmorrhagica, or petechiæ sine febre of authors, is more nearly allied to scorbutus than any other disease; but in the latter the livid spots are more numerous and less varied as to appearance; the disease is of sudden, and often inexplicable occurrence; and is without the spongy gums, fœtid exhalations, and depressed spirits of scorbutus. From the petechiæ of malignant fever, scurvy is distinguishable by the absence of prior pyrexia.

Prognosis. — This is unfavourable, if the disorder has been of very long continuance, and characterised by much malignity. In the general way, however, scurvy will soon yield to change of place and circumstance, and diet.

Treatment. — Vegetable food and vegetable acids, are the principal antiscorbutics, and ships going on long voyages ought always to be furnished with the concrete form of the citric acid. Nitre is a good antiscorbutic; in cases of great prostration, it should be united with Peruvian bark. Sulphate of quinine for ship medicine? The mineral acids, also, are useful.

R Acidi muriatici.

—— nitrici āā ʒ xij.

Sacchari albi ʒ ss.

Aquæ puræ f ʒ vii ss.

Fiat potus communis.

Tamarinds and crystals of tartar (the supertartrate of potass), made into drinks, are likewise serviceable. But the great remedies for scurvy are change from de-

spondency to hope; from filth to cleanliness; and from a cold and damp to a temperate and dry climate.

GENUS LXXXV. ELEPHANTIASIS.

A contagious disease; thick, rugose, rough and unctuous skin, without hair. Insensibility in the smaller joints; face deformed with tubercles; the voice hoarse and nasal.

This is one of the tubercular diseases of Willan and Bateman, and a very different affection from that which usually goes under the name of elephantiasis in this country, which last is an enlarged limb, somewhat like the Barbadoes leg; and the connected disorder in the integuments is squamous or scaly, and not tubercular.

It is allowed by most persons, that the true elephantiasis is very little under the influence of known curative means. In the only case I ever saw of this tubercular disease, the sulphurous vapour baths were about to be tried; but what was their effect I have not heard. The boy, who was the subject of the complaint, had just landed from one of our East India ships.

GENUS LXXXVI. LEPROSY. (*Lepra*.)

The skin rough, from furfuraceous whitish scales, which are sometimes moist underneath, itching.

Respecting lepra, as well as elephantiasis, there has been much mistake and much controversy. It has been contended, that the lepra of the antients and the elephantiasis are one and the same thing; but that the Syrian or Arabian leprosy, that which we find an account of in the Levitical writings, is different from the lepra Græcorum. Dr. Good ingeniously accounts for the confusion, by the Arabic translators confounding a generic with a specific

term. The fact is, I believe, that a great deal more is to be set down, than systematics are inclined to do to the changes which climate, and time, and circumstance operate upon these affections.

What we usually now term lepra, is a scaly, not a tubercular or porriginous disorder; it breaks out in rounded defined patches, frequently, in the first instance, just above or below the knee, and extends over all the parts of the body.

It is best treated by diluted sulphuric acid, in the dose of twenty drops night and morning; the parts may be washed with a solution of oxymuriate of mercury, two grains to two fluid ounces of distilled water; or may be touched with a small quantity of the unguentum hydrargyri nitratis. The liquor arsenicalis, in five or six drop doses, two or three times, is sometimes employed. Under all treatment, however, lepra is often a tedious disorder, lasting for many months, and even sometimes years. The decoction dulcamaræ is a favourite with some practitioners.

GENUS LXXXVII. YAWS. (*Frambæsia*.)

Mulberry or raspberry-like fungous eruptions, breaking out upon various parts of the skin.

This is a disease common in the West India islands, and generally supposed to have been imported from Africa. Dr. Adams imagines that the Jewish leprosy was rather the yaws, than either the lepra or the elephantiasis of the present day.

Separation is absolutely necessary of individuals affected with it, and the treatment is best effected by paying great regard to cleanliness; using the warm-bath; taking alterative doses of mercurials, with decoction of sarsaparilla. To the large master eruption, which continues after others

have died away, it is right to apply the solution of oxy-muriate of mercury, mentioned under *Lepra*; or the unguentum hydrargyri nitratis, or unguentum hydrargyri nitrico-oxydi.

GENUS LXXXVIII. PLAITED HAIR. (*Trichoma.*)

A contagious disorder, the hairs thicker than common, and inextricably matted together. This seems to be a malignant degree of the porrigo scutulata, or scald head of modern authors; it appears in Poland, and hence has been named the plica Polonica; it seems, however, to be produced by neglect of combing the long hair, and general habits of uncleanness.

Cleanliness is its great preventive and cure; the hair should be taken off; the head kept well washed with soap and water, and very small doses of mercury may be occasionally necessary to correct the disordered habit. Indeed, one general principle pervades the requisites in these cutaneous ailments; and, with little exception, what is serviceable to the one is serviceable to all. Drugs without cleanliness would make a sorry figure in all cases.

GENUS LXXXIX. JAUNDICE. (*Icterus.*)

Yellowness of the skin and eyes; whitish fæces, the urine being of an obscure or dark red, and tinging linen of a yellow colour.

The calculous, from gall-stones; the spasmodic from spasm about the gall ducts; the hepatic, connected with disease in the liver; the gravid, occasioned by the gravid uterus pressing upon the bile passages; and the infantile, produced by a retention of the meconium, are the species marked by Dr. Cullen: to these, says a modern author, might be added another; *viz.* the mucous, or that jaund-

ice occasioned by a collection of viscid mucus in the duodenum, plugging up the entrance of the choledic duct into the intestine.

Symptoms.—Great depression of spirits and indisposition to exertion are often the first showings of jaundice, when the disorder is ushered in gradually; when it occurs in consequence of spasm or gall-stones, intense pain is usually the primary symptom. Heat and pricking, and eventually itching of the skin, usually accompanies the complaint in its course; a bitter taste is often perceptible in the mouth; an irregularity, as well as altered colour of the alvine discharges, takes place; occasionally vomiting occurs; feverishness also is present, but with more or less decision, according to the nature of the cause which has produced the yellow hue of the skin. In long protracted and malignant jaundices, the skin from being yellow merely becomes livid; hæmorrhages from the intestines occur; and what is vulgarly called black jaundice comes thus to be established.

Causes.—See under the definition and description of species. Besides the causes there mentioned, the disorder occasionally and frequently acknowledges other sources; such as diseased pancreas, or pylorus, or stomach, or other derangement of structure about these parts. Sometimes the mere collection of hardened fæces in the colon, will throw the bile back upon the liver and system, and thus occasion jaundice. Not seldom jaundice is occasioned without obstruction of bile, merely from a redundancy of its secretion, as in what are called bilious fevers; and now and then, intense passion or feeling will produce the complaint with or without painful spasm of the gall-ducts, or rather, perhaps, of adjacent parts. With respect to the rationale of the altered colour, it is evidently produced by bile mixing with the blood and secre-

tions; but whether this bile gets into the system partly by regurgitation, or altogether by absorption, is not, perhaps, quite evident.

Diagnosis. — The yellow colour of the skin, and deficient yellowness of the fæces and high colour of the urine, are the characteristic features of jaundice. The pain from gall-stones or spasm, is distinguishable from inflammatory pain by the number of pulsations never corresponding with the degree of the pain. From the pain of nephritis and urinary calculi, see page 198.

Prognosis. — The disorder usually terminates favourably, unless occasioned by hepatic or other organic disorder. The favourable symptoms are, the skin and fæces acquiring their usual colour, and a degree of diarrhœa occurring upon the cessation of pain; universal itching following the painful prickly sensation of the surface, and the urine becoming of a lighter colour. The unfavourable symptoms are, a tendency to livid appearance on the surface; vertiginous and other affections of the head, hæmorrhages from the bowels, and anasarca swellings. Much perspiration, too, of a colliquative kind is generally a bad omen; and the pulse, from being hitherto natural and slow, becoming hard and frequent.

Treatment. — The great object of practice will be, to cause the bile again to flow freely into the duodenum and through the intestines; the cause of the obstruction must, of course, be sought for; if much pain is present, opium is loudly and imperatively demanded. From twenty to thirty drops of the tincture, or two grains of the solid opium, may be given every second or third hour, or oftener, till the pain subsides; and although inflammation be not present, a preliminary bleeding may be sometimes advisable, in order to make way, as it were, for the free and full action of the opiate. Warm fomentations to the abdo-

men must be had recourse to; and after the pain may have somewhat subsided, cathartic pills may be administered. These are the remedies for the active and painful form of the disorder. The more gradual and less acute kind, calls for emetics and purgatives, and biliary solvents, according to circumstances. In the *icterus mucosus*, emetics are often exceedingly useful, they are best formed of ipecacuan; and in chronic cases of jaundice it will be sometimes found expedient to keep up nausea for some time. Blisters on the region of the liver, and sparks of electricity drawn over the right hypochondrium, have been known to emulge the bile, and cure jaundice when other measures have failed: when, as is often the case, a degree of chronic inflammation has been induced in the liver, from the interruption caused in its functions, the remedies directed under the head of *Hepatitis* are to be resorted to. (See page 193.) The pills recommended in page 195., continued for some length of time, and combined with bitters and the taraxacum, have proved advantageous in correcting chronic jaundice. Turpentine, also, with æther, has been thought by some specifically operative in resolving biliary concretions. When the icteric disorders continue from mere debility, steel, with small doses of purgative salts, will be found of service. Thus Cheltenham waters prove beneficial to the semi-icteric state, that is connected with a chronic disorder of the liver, brought on by residence in tropical climates. Raw eggs are recommended by many, to be taken freely, when the purpose of the practitioner is that of procuring a deobstruent operation. The copaiba, too, which may be mixed with egg, is administered with the same intention.

R Copaibæ ℥ xxv.

Vitelli ovi q.s.

Spiritus ætheris nitrici.

———— sulphurici āā f ʒ ss.

Syrupi simplicis f ʒj.

Aquæ puræ f ʒ iss.

Fiat haustus ; bis terve in die sumendus.

AUTHORS ON THE DISEASES PRINCIPALLY COMPRISED IN
CULLEN'S THIRD CLASS OF CACHEXIA.

Bateman, on Cutaneous Diseases ; *Blackall*, on Dropsies ; *Blane*, on the Diseases of Seamen ; *Lloyd*, on Serophula ; *Maclean*, on Hydrothorax ; *Pemberton*, on Diseases of the Abdominal Viscera ; *Plumbe*, on Diseases of the Skin ; *Pringle's* Diseases of the Army ; *Russell*, on Serophula ; *Trotter*, on Scurvy ; *Willan*, on Cutaneous Diseases.

CLASS IV. LOCAL DISEASES.

(See Part I. page 91.)

Affection of a part, not of the whole body.

On this, the fourth class in Cullen's Nosology, our remarks will, for obvious reasons, be exceedingly brief. Indeed I have neither space nor intention to do much more than merely translate the orders and genera, introduced under this division.

ORDER I. FAULTY PERCEPTIONS. (*Dysæsthesiæ*.)

Deprivation or loss of sense, from a derangement of external organs.

GENUS XC. BLINDNESS. (*Caligo.*)

The sight diminished, or altogether destroyed, from an opaque body between the object and the retina, either existing in the eye itself or its appendages.

The species are :

- I. Affection of the lens.
- II. Of the cornea.
- III. Of the pupil.
- IV. Of the humors.
- V. Of the palpebræ.

GENUS XCI. OBSCURITY OF SIGHT. (*Amaurosis.*)

The sight diminished or altogether abolished, without evident affection of the eye ; the pupil, for the most part, being dilated and immoveable.

The species are :

- I. From compression.
- II. From atony.
- III. From spasm.
- IV. From poison.

Attention has recently been called more especially to that kind of amaurotic affection which results from too much fulness of vessel, or determination of blood about the retina ; and amaurosis from inordinate employment of the eyes, which was wont to be considered atonic or paralytic, is now a good deal considered as a congestive or inflammatory state of parts.

GENUS XCII. DIFFICULT SIGHT. (*Dysopia.*)

The sight so depraved, as that objects are only clearly seen in one particular light, or at a certain distance, or in a certain position.

The species are :

I. Dysopia of darkness, objects not being perceptible unless in a very bright light.

II. Of light, in which a degree of darkness is required for correct vision.

III. Of distance, in which more than usual proximity of the object is required.

IV. Of proximity, in which the object is only seen well at a distance.

V. Of obliquity, in which the object to be perceived requires to be placed in an oblique position.

GENUS XCIII. FALSE SIGHT. (*Pseudoblepsis*.)

The sight so depraved, that the individual imagines he sees things that do not exist ; or sees existing things differently from what they really are.

This is a disorder, for the most part, rather of the perceptive power than of the visual organ.

GENUS XCIV. DIFFICULT HEARING. (*Dysecœa*.)

The sense of hearing diminished or abolished.

It is either,

I. Organic ; or,

II. Atonic, without apparent disorder in the organ.

GENUS XCV. DEPRAVED HEARING. (*Paracusis*.)

The species are :

I. Imperfect, in which sounds are not heard accurately or in the usual manner.

II. Imaginary, in which sounds are excited internally, which do not exist without.

GENUS XCVI. DIMINISHED SMELL. (*Anosmia*.)

The sense of smell diminished or lost.

The species are :

- I. Organic, from a disorder in the organ.
- II. Atonic, without organic disorder.

GENUS XCVII. DIMINISHED TASTE. (*Agheustia.*)

Taste diminished, or abolished.

The species are :

- I. Organic.
- II. Atonic.

GENUS XCVIII. LOSS OF FEELING. (*Anæsthesia.*)

The sense of touch diminished, or abolished.

In all these affections of sense it will be found of the highest moment, to view the local disorder in conjunction with the state of general energies; and although it may be wrong to give into the chylopoietic mania of stomachising every thing; it is not only right, but absolutely necessary, both in medical and surgical practice, to consider that organs are not isolated materials for mechanical manifestation, but that they are parts of a whole.

AUTHORS ON AFFECTIONS OF THE SENSES. (See p.165.)

Abernethy, on the Constitutional Origin of Local Diseases; *Chandler*, on the Diseases of the Eyes; *Chevalier's* Lectures on the Skin; *Saunders*, on the Anatomy and Diseases of the Ear; *Stevenson's* Works on the Eye; *Ware*, on Cataract; *Warner*, on the Eye.

ORDER II. DEPRAVED APPETITE. (*Dysorexia.*)

The appetite either erroneous or deficient.

*SECT. I. ERRONEOUS APPETITE.**GENUS XCIX. VORACIOUS APPETITE. (Boulimia.)*

The desire for food being greater than the possibility of digestion.

GENUS C. INORDINATE THIRST. (Polydipsia.)

This is almost always sympathetic.

GENUS CI. PRETERNATURAL LONGING. (Pica.)

Desire for taking into the stomach materials which are not esculent.

GENUS CII. LASCIVIOUSNESS. (Satyriasis.)

Ungovernable venereal desire in the male.

The species are :

- I. Without ; and,
- II. With much general disturbance of the frame.

GENUS CIII. INORDINATE LUST IN THE FEMALE. (Nymphomania.)

Ungovernable desire in women.

GENUS CIV. NATIONAL INSANITY. (Nostalgia.)

A vehement desire for re-visiting home, when absent from our country.

In judging medically of all the above irregularities, the main object will be to ascertain, whether the state of the organ affects the frame ; or whether the frame is affected primarily, the organic ailment being an accidental development of general disorder.

These ailments, especially those connected with sexual peculiarities, often require a good deal of delicacy and discernment from the practitioner: many are the instances in which physical states have been considered moral derelictions; but on the other hand, we must be careful of not running into the medical materialism of placing every thing to the charge of organic necessity. A proper regulation of the mind and moral sense will often do wonders. Let the feelings of the practitioner, however, always bear towards the *material* and merciful side of the question; and let him be ready to comfort the patient, whose organic disorder shall be kept up and increased by the erroneous conception, that he or she in being the subject of such disorder is then and therefore criminal.

SECT. II. DEFICIENT APPETITES.

GENUS CV. WANT OF DESIRE FOR ESCULENT FOOD. (*Anorexia*.)

The species are :

I. Humoral, from the secretion (*ab humore*), pressing upon the stomach.

II. Atonic, from loss of muscular tone. (See *Dyspepsia*, page 266.)

GENUS CVI. DEFICIENT THIRST. (*Adipsia*.)

This, like polydipsia, is a sympathetic or symptomatic disorder.

GENUS CVII. DEFICIENT VENEREAL DESIRE. (*Anaphrodisia*.)

Want of desire, or want of power for the venereal act.

This last is often an imaginary affection, and creates great uneasiness to the party or parties concerned. Dr. Darwin records two cases of youths who committed suicide under the erroneous conceit of being impotent; and John Hunter relates a most instructive case in which temporary and merely imaginary want of power was overcome by a medical manœuvre. It will be for the medical practitioner, when consulted on these distressing occurrences, either to do as Mr. Hunter did, cheat his patient into a proof of power, or give assurances that the feeling and fear are mere hallucinations resulting from morbid delicacy and apprehension.

ORDER III. IMPEDED OR DEPRAVED MOTIONS FROM ORGANIC DEFECT. (*Dyscinesiaë.*)

GENUS CVIII. LOSS OF VOICE. (*Aphonia.*)

Suspension of vocal power, without coma or syncope.

The species are :

- I. Guttural.
- II. Tracheal.
- III. Atonic or nervous.

GENUS CIX. DUMBNESS. (*Mutitas.*)

Want of articulating power.

The species are :

- I. Organic, from loss or defect of tongue.
- II. Atonic, or nervous.
- III. From deafness; this being from birth, or taking place in early life.

GENUS CX. DEPRAVED UTTERANCE. (*Paraphonia.*)

The species are :

- I. The paraphonia of puberty.
- II. Of hoarseness.
- III. Nasal.
- IV. Palatine.
- V. The ringing (clangens.)
- VI. Comatose, and from relaxation.

GENUS CXI. STAMMERING. (*Psellismus.*)

Vitiated articulation.

The species are :

- I. Hesitating.
- II. Ringent, (ringens,) in which the R is aspirated, and, as it were, doubled.
- III. Lallant (lallans,) in which L is sounded too liquid or pronounced in place of R.
- IV. Emollient ; in which the hard letters are too much softened, and S is too much used.
- V. Babbling with too large a tongue.
- VI. Magilalial ; the labials defectively pronounced.
- VII. From divided palate ; in this, the gutturals are erroneously expressed.

In all affections of the voice, from aphonia, down to a scarcely observable deficiency of utterance, it will be for the physician or surgeon to endeavour at ascertaining accurately the condition of the pharynx, the larynx, the nervous power, and the general health, and to act or refrain from acting accordingly. When the voice is interfered with, from a lax state of the laryngeal ligaments, or from a deficiency of nervous supply to these parts, stimulants and tonics are demanded, both general and

local; when the mucous surfaces cause the hoarseness by deficient or superabundant secretion, expectorants and emollients are demanded. When the defect is from a disordered condition of the digestive organs, purgatives, alteratives, stomachics, and change of air, will prove useful; but when, as is too often the case, the power of utterance is lamed by organic defects, either in the hearing or the speech, nothing can be affected but by a very tedious and operose attention, beyond the precincts of medical care.

GENUS CXII. SQUINTING. (*Strabismus.*)

The axes of vision not corresponding.

The species are :

- I. Habitual, from the custom of using only one eye.
- II. From one eye being more mobile than the other.
- III. From changes in the form or situation of parts of the eye.

The habit of squinting can only be corrected by encouraging a simultaneous use of both eyes. It is expedient often to notice it but little in young people, for the more it is endeavoured to be corrected by command, the more inveterate it is apt to become. The organic or symptomatic squinting is, of course, only remediable through the producing disorder.

GENUS CXIII. DIFFICULT SWALLOWING. (*Dysphagia.*)

Impediment to deglutition, without any affection of the respiratory organs or phlegmasia.

In all cases of difficult swallow, it should, of course, be ascertained, whether the impediments consist of an organic disorder in the œsophagus (and organic strictures

of this part are not infrequent), or whether the affection be merely atonic, or, as it is vulgarly termed, nervous; in which cases, strengthening medicines and generous living are advisable. It sometimes, however, happens, that the nervous constriction of the œsophagus is sympathetic of stomach and intestinal diseases, when, of course, stomachics and purgatives are demanded.

GENUS CXIV. CONTRACTION. (*Contractura.*)

Rigid and permanent contraction of joints.

This is muscular or articular, and to be treated by friction, or other local and general stimulants, according to circumstances.

ORDER IV. MORBID DISCHARGES. (*Apoccnoses.*)

FLUX, either of blood or other fluids, without pyrexia or increased impetus.

GENUS CXV. FLUX OF BLOOD. (*Profluvia.*)

GENUS CXVI. FLOW OF SWEAT. (*Ephidrosis.*)

There can be no doubt of vascular debility being such occasionally as to destroy the usually retaining power, either of blood-vessels or of excretories, and to permit transmission or effusion in the way now supposed. In the sweating disease, which occurred endemically in Britain some years since, the cutaneous excretories must have been deprived of their tonic resistance to ordinary impetus; and both scurvy and some cases of petechiæ sine febre seem to be referrible to a debilitated condition of blood-vessel: about these facts and principles we have

still, however, much to learn. (See Part I. p. 53. and p. 51. to 55.)

The mineral acids, especially the sulphuric, are the remedies indicated in these circumstances of vascular weakness.

GENUS CXVII. FLOW OF TEARS. (*Epiphora*.)

Either caused by an increased secretion from the lachrymal gland, or by an obstruction of the lachrymal ducts.

GENUS CXVIII. FLOW OF SALIVA. (*Ptyalismus*.)

GENUS CXIX. FLOW OF URINE. (*Enuresis*.)

Either produced by an atony in the sphincter of the bladder, in which case the tincture of cantharides and tinctura muriatis ferri may be used with advantage; or dependent upon inflammatory or organic disorder either in the inner coat of the bladder, or neighbouring parts.

GENUS CXX. CLAP AND GLEET. (*Gonorrhœa*.)

A preternatural flux from the urethra, either with or without venereal desire.

The word properly means seminal flow, and, of course, is improperly introduced as a designation of the disorder to which it is usually applied.

These urethral fluxes are, for the most part put under the surgeon's care. When the discharge is seminal, it must be ascertained by the physician how far mere debility; how far mere imagination; and to what extent other disorders are connected with the morbid state. Let the practitioner always carefully abstain from increasing the distress and disorder of his patient, by making more of

the affair than is necessary; or by treating as a deviation from moral rectitude, what is generally a mere physical and accidental affair.

ORDER V. SUPPRESSED DISCHARGES. (*Epischeses.*)

GENUS CXXI. CONSTIPATION. (*Obstipatio.*)

An interruption to the due discharge of fæces, mostly depends upon diseases that have already fallen under notice. Exercise, change of air, friction of the abdomen in the morning; and, above all, endeavouring to establish a regularity with respect to the daily evacuation, constitute the best remedies for habitual costiveness. Charcoal has been said to be possessed of efficacy in overcoming some kinds of constitutional constipation.

GENUS CXXII. SUPPRESSION OF URINE. (*Ischuria.*)

This is either renal, ureteral, vesical, urethral, or sympathetic, and must be cured by curing the malady upon which it has depended.

GENUS CXXIII. DIFFICULT FLOW OF URINE. (*Dysuria.*)

The same observation here must be made by the practitioner, as in the preceding genus, and remedies applied accordingly.

GENUS CXXIV. IMPEDED AND INEFFICIENT FLOW OF SEMEN. (*Dyspermatismus.*)

Arising from an affection of the urethra; of the corpora cavernosa; of the prepuce; or produced by thickened mucus in the urethra; by too powerful an erection;

from a species of epilepsy in the act of coition; from deficient power in the genitals; and from the seminal fluid being thrown into the bladder, instead of being ejected.

GENUS CXXV. SUPPRESSED, OR DIFFICULT MENSTRUATION. (*Amenorrhœa.*)

The menstrual flux is sometimes impeded by a plethoric condition of parts, preventing the due secretion from the uterine vessels; and in this case, either general bleeding, or leeches to the pubic region will prove useful. When much pain is connected with the suppression, we must follow up our bleeding by warm bathing or fomentation; and by the administration of anodynes, either of opium or henbane, or other vegetable narcotics. Half-grain doses of the extractum stramonii, will sometimes ease the pain of difficult menstruation. When the pain and suppression are from mere atony or weakness, invigorating measures will be demanded. In these cases, the warm and fœtid gums will often avail in assisting regularity and freedom of flow, such as the myrrh or galbanum. The pilula galbani composita, of the Pharmacopœia, is a good preparation. Pediluvium is generally desirable, in combination with other means. The cantharis and savin will occasionally prove of service. (See *Chlorosis*, p. 272.)

ORDER VI. TUMOURS. (*Tumores.*)

Enlargements of parts without inflammation.

GENUS CXXVI. ANEURISM. (*Aneurisma.*)

A soft pulsating tumour upon an artery.

GENUS CXXVII. IRREGULAR VEIN. (*Varix.*)

A soft tumour not pulsating upon a vein.

GENUS CXXVIII. SANGUINEOUS EFFUSION. (*Ecchymoma.*)

A spreading, livid tumour, but little elevated.

That effusion of blood and serum into the cellular membrane, which is occasioned by bruises, is an instance of ecchymosis; and occasionally this kind of extravasation takes place spontaneously in an obscure manner. (See under Genus CXVI. and the references.)

GENUS CXXIX. SCHIRRUS.

This term is applied to that alteration which glandular substance undergoes, in consequence of a peculiar kind or particular grade of inflammation; to discuss the propriety of the term would lead me too far into surgical pathology.

GENUS CXXX. CANCER.

Schirrus becoming painful, and passing into malignant ulcer.

The pathology of cancerous ulceration is exceedingly obscure; but for the reasons just stated, its proper investigation in this place cannot be engaged in.

GENUS CXXXI. GROIN SWELLING. (*Bubo.*)

A suppurating tumour of a conglobate gland.

GENUS CXXXII. FLESHY TUMOUR. (*Sarcoma.*)

Soft swelling, not painful.

GENUS CXXXIII. WART. (*Verruca.*)

A hard scabrous swelling.

GENUS CXXXIV. CORN. (*Clavus*.)

A lamellated hardness of the cuticle.

GENUS CXXXV. WEN. (*Lupia*.)

Moveable, soft, insensible tumour under the skin.

GENUS CXXXVI. GANGLION.

A hard moveable tumour, situated on a tendon.

GENUS CXXXVII. HYDATID.

A cuticular vesicle, filled with aqueous fluid.

GENUS CXXXVIII. WHITE SWELLING. (*Hydarthus*.)

Swelling of the joints, especially of the knee; at first but slightly elevated and not changing colour; exceedingly painful and diminishing the mobility of the joint.

GENUS CXXXIX. TUMOUR ON BONE. (*Exostosis*.)

The morbid changes characterised by the above denominations, are far from being satisfactorily traced; they are for the most part, of course, connected with disordered condition of the secretant and absorbent systems; but their specific modes of development are often exceedingly obscure; they are usually, however, considered as principally lying within the province of surgery.

ORDER VII. PROTRUSION. (*Ectopiæ*.)

Parts displaced, and therefore forming tumours.

GENUS CXL. RUPTURE. (*Hernia*.)

Protrusion of a soft part, the skin and external integuments untorn.

GENUS CXLI. PROLAPSE. (*Prolapsus.*)

Protrusion of a soft part, the skin being torn away (*Nuda.*)

GENUS CXLII. LUXATION. (*Luxatio.*)

The removal of a bone from its proper position in a joint.

ORDER VIII. DIVISION OF PARTS. (*Dialyses.*)

Solution of continuity, evident to the sight or touch.

GENUS CXLIII. WOUND. (*Vulnus.*)

Vascular connection dissolved in a soft part, produced by a hard body.

GENUS CXLIV. ULCER. (*Ulcus.*)

Purulent, or ichorous solution of a soft part.

GENUS CXLV. TETTER. (*Herpes.*)

Small ulcers or vesicles (*phlyctenæ*), clustering, spreading, and difficult to heal.

The term *herpes* has a more extensive signification with some authors than with others; every ulceration, which in common language would be called a tetter, would be regarded by many as herpetic; while the cutaneous pathologists who adopt cognomina from external manifestation, limit the denomination of herpes to vesicular eruption; of which shingles constitutes an example. (See Appendix.)

GENUS CXLVI. SCALED HEAD. (*Tinea.*)

Small ulcers at the roots of the hairs, giving out a humour, and terminating in a whitish crust.

This is a porriginous, as opposed to the vesicular disorder of the preceding genus.

GENUS CXLVII. ITCH. (*Psora.*)

Pustules, and small itching ulcers; contagious; affecting the hands. (See Appendix.)

GENUS CXLVIII. FRACTURE. (*Fractura.*)

A destruction of osseous cohesion, and separation of bone by force into large pieces.

GENUS CXLIX. DESTRUCTION OF BONE BY ULCERATION.
(*Caries.*)

*End of the Nosology, and of the Second Part of
the Compendium.*

PART III.

MISCELLANEOUS.

SUBDIVISION I. *Appendix to the Nosology.*

THAT a *cryptogamic* addition is required to complete an artificial classification of disease, constitutes in itself no proof of nosological error, since, as I have before intimated, (see Part I. p. 6.) even an anatomical arrangement of morbid affection would, under the present circumstances of our pathological knowledge, leave some of the most important disorders untouched by its embrace. There are, however, one or two morbid states, the due consideration of which Dr. Cullen has neglected; and one or two others beside, that had not been noticed or investigated at the time the nosology was published; and it therefore behoves us, in a work like the present, to devote a page or two to their brief investigation.

On the subject of worms, acute hydrocephalus, calculary disorders, and cutaneous affection, the nosology and first lines of Cullen will be found defective; while vaccinia, angina poetoris, and tic douloureux are affections in respect of name and especial investigation, posterior to the time of our systematic.

WORMS. (*Vermes.*)

To mention the whole series of symptoms connected with the presence of these parasitical animals were to compass the whole round of painful affections to which the frame is incident; and it is worthy of remark, that each,

and all of these symptoms, shall at times show themselves as mere manifestations of the disposition to engender worms, without their existence. This is, indeed, so much the case, that I have often been disposed to think the development, or actual production of the animal or animalculæ, is rather a consequent condition than a prior circumstance of verminose ailment, and that sometimes when the worms become actually formed, half the termination of the complaint is accomplished. That this, however, is not always the case, is on the other hand sufficiently evident; for we occasionally meet with formidable disorder, that refuses to yield to any other treatment than that which *expels* worms from the body; and this effect being accomplished, every thing again falls, or I might say, rushes into its ordinary and orderly course, with the rapidity almost of a charm.

The most prominent symptoms of worms are, variable and capricious appetite, with as variable a state of the digestive power; fœtor of the breath; fulness of the upper lip; paleness of face, with a dark circle about the eyes, and a large fixed pupil; itching in the nostrils and anus; slimy stools; irritating cough; grinding of the teeth during sleep, and nervous depression or irritability.

Their *modus generandi* is still, and, perhaps, ever will continue to be, a subject of dispute. Our feelings rather revolt from the notion of spontaneous origin of living matter, but the altogether of verminous formation seems to me more consistent with the inference, that intestinal or visceral mucus, becomes vivified by some inexplicable circumstances connected with animal movements, than that every time a thread worm presents itself in the rectum, it has been preceded by its particular ovum; and the circumstances to which I have just alluded, *viz.* nervous derangements, apparently prior to the actual pre-

sence of the worm, would seem to harmonize with, and tend to the establishment of this assumption.

The species of worms in natural history are very numerous; but the medical enumeration of them may for practical purposes be limited to three, *viz.* the *ascaris vermicularis*, or thread worms; the *lumbricus teres*, or round worms; and the *tænia*, or tape worm. The especial locality of the first being the rectum; of the second, the small intestines; the third, the whole length of the intestinal canal, more particularly, however, at its upper part.

Prognosis and Diagnosis. — Worms are but seldom directly fatal; when they do terminate life, it is by the induction of other disease. In respect of their diagnosis, we must always recollect that there is scarcely a malady incident to the frame, that they will not at times simulate; and when the young practitioner meets with disordered manifestations that he cannot account for upon ordinary principles, he ought always to have his attention on the alert to one or other of the above-mentioned signs, and not set about treating as organic, or visceral, or inflammatory, or idiopathic, what may prove to be merely sympathetic, upon a verminose state.

Treatment. — Let the principle always be kept in mind, that mere expulsion will not invariably suffice; this is indeed sometimes, as it appears to me, rather creation than expulsion, for forcing violently the mucous secretion of the intestinal surface may bring into act and being mere tendencies: this much is at least certain, that scouring from day to day the intestinal canal from mucus and worms, will prove an unavailing practice as a radical vermifuge; and that change of air, or of the state of the stomach, or of the mental conditions, will often instantaneously and radically and lastingly operate the desired effect.

Evacuants are, however, sometimes loudly called for,

and of these, the best for the tape worm, and even for the round worm, is, perhaps, the oleum terebinthinæ, one fluid ounce of which may be shaken together with an equal quantity of oleum ricini, and taken as a draught with peppermint water. The Indian pink given in powder, or infusion, is also a good vermifuge, especially for the round worm : it is best given in combination with rhubarb.

R Radicis spigellii.

—— rhæi āā ʒ ss.

Aquæ ferventis f ʒ xii.

Stet per horas duas.

R Liquoris colati f ʒ iss.

Tincturæ rhæi compositæ f ʒ iss.

Fiat haustus.

To expel the thread worms, calomel and scammony, and senna, and lime-water, and tobacco, and indeed almost all the active and drastic purgatives are occasionally employed. Some of the vermifuges act mechanically, and upon this principle the cowage is much used, which is sold as an anthelmintic, with directions for its employment; others act chemically, as is probably the case with lime-water; and others by the principle, simply, of purgation, as castor oil, rhubarb, aloes, &c.; and, after all, perhaps, this last is, for the most part, the safest and best principle to act upon; the counteraction of the condition upon which worms depend, being the great business to be aimed at, and this being best effected by change of air, change of scene, change of diet, and whatever breaks in upon those habits with which a wormy tendency has associated itself. The tonics and stomachics recommended under the head of dyspepsia will, of course, be called for; with which very small doses of the hydrargyrus cum creta, taken every night for some length of time, will often be found effectually to harmonize.

Hydrocephalus.—This disorder, when attended, in the first instance, with phrenitic symptoms, and happening upon a lymphatic or strumous constitution (see Part I. p. 85.), is a distinct and peculiar affection. It is marked with more or less precision by three distinct sets of symptoms, constituting the manifestation of three separate stages. In the first you have nausea, irregularities in the alvine discharges, febrile restlessness, aversion from light or sound; in a word, phrenitis (which see). This lasts, if uninterrupted, for some days, a week, more or less; you have then the true hydrocephalic condition manifest itself; the pulse becomes remarkably slow, and almost, or quite intermittent; the pupils, instead of showing increased susceptibility to light, remain uncontracted by its application; screamings, and rolling of the head upon the pillow, and disturbed sleep, and strabismus occur; and after these symptoms shall have been observable for some days, a sudden and unexpected improvement takes place, so as to cheat the friends of the patient, and often even the medical practitioner, with false hope; then, in the course of another day or two, an alarming and often tremendous scene opens upon us; the pulse now becomes hurried, far beyond the rapidity of the first stage, strabismus is confirmed; the little patient's cheeks are periodically painted with the flush of hectic (see *Hectic*). Violent convulsions occur, and coma terminates existence.

Causes.—Scrophula is the disposing, and, in the majority perhaps of cases, difficult dentition the exciting cause of the complaint. In the predisposed, however, any thing may excite the disorder which has power to excite inflammatory irritation. It has been stated as an universal proposition, that stomach and bowel irregularities are the sources of hydrocephalus; this is an error. It always, however, behoves us to have an especial eye over intes-

tinal and visceral derangements in children prone to the malady, which proneness is sometimes found to run through families.

Prognosis.—Always fearful when the symptoms are fully marked. When, indeed, effusion has taken place to any considerable extent, the chances are at least an hundred to one against the patient's recovery.

Treatment.—Bleed and purge in the first instance, with a due regard to the age of your patient, and its constitutional peculiarities. I think small doses of elaterium, say the sixth of a grain to a young child, will be generally found the most efficacious purgative in the phrenitic stages of hydrocephalus. Anti-phlogistic medicinals, with digitalis, are to be had recourse to, according to circumstances. A blister to the nucha, but not to the head; and this last to succeed blood-letting by leeches, or from the temporal artery, not precede it. The gums are to be freely lanced, when dentition is the source of the irritation.

In the event of not succeeding during the first stages, the principle of remedial operation must be rather that of direct excitation of the absorbent energy; and although the chances, as I have stated, are so much against us, we ought still to pursue remedial plans under the possibility of success. Under these circumstances, mercury in large doses is the favorite resort of some practitioners, but I am doubtful of its efficacy. Digitalis and cantharides, with a continuance of purgatives and blisters, and deobstruents, and diuretics, are, I think, preferable means. I have given taraxacum to children under these circumstances, combined with cantharides, and in one or two cases with evident advantage.

R Hydrargyri cum cretà gr. ij.

Pulveris digitalis gr. $\frac{1}{4}$.

Fiat pulvis; ter in die sumendus; ex vehiculo crasso; superbibendo haustum sequentem.

R Extracti taraxaci ℥ ss.

Spiritus ætheris nitrici ℥ xv.

Tincturæ cantharidis ℥ iv.

Syrupi simplicis f ʒ j.

Aquæ puræ f ʒ iiss.

Fiat haustus.

When opiates are given to lessen the violence of convulsive action, the best form of administering them is, that of the pulvis ipecacuanæ compositus, which seems especially adapted for encephalic irritation. It must, however, be recollected that opiates in any form are in some sort objectionable, especially when the state is rather that of congestion than effusion.

Calculus Affections.— Chemical pathology has rather advanced the rationale of these affections than thrown much light on their treatment, for in consistency with the principle already adverted to (see Part I. p. 15.), direct agency of a chemical nature is in a great measure, denied to the desires of the physician. It is, however, of some practical, as well as philosophical consequence, to ascertain the kind and composition of those concretions which are occasionally deposited from the urine, either in the bladder, or the kidneys, and which are sometimes, indeed, met with in the prostate gland, in the ureters, and in the urethra. To the writings of Marcet, and Wollaston, and Prout, I must refer for particulars on this interesting subject of pathological investigation, and must confine myself to stating here, that the lithic acid calculus is in a very large proportion the most common, and that the *gravel*

of this concretion is deposited from the urine, in the form of *red sand*; that, next to this, the most frequent of the sandy deposits, occasioning in their passage what is called a fit of gravel, are the earthy phosphates, which exhibit a *whitish sand*. Indeed, beyond slight modifications of the red and white gravel, I do not know that any varieties of calculus in the form of gravelly deposition are recognizable.

Symptoms of Gravel. — The same as of nephritis generally (which see.) When nephritic irritation is present, without being traceable to any obviously external cause, the presence of gravel is generally to be suspected.

Treatment. — The irritation is to be subdued in the same manner as in nephritis and cystitis, from other sources. Magnesia, in cases of red gravel, ought to be given freely during the paroxysms of the disorder, and continued during the intervals, in half drachm and drachm doses, once or twice a day, in order to counteract the lithic tendency; soda, and potass, and soap, may be employed with the same intention (see for formula, p. 201.). The carbonates of these medicines, are, in the general way, better than the caustic forms of them, as they may be given in larger quantities; and the carbonic acid with which they are combined, unites with some of the acidity of the stomach, and thus, probably, the alkaline principle is transmitted to the kidneys, with more purity and freedom.

When the gravel or sand is white, we must not give magnesia or alkalies, but substitute for them the mineral acids, more especially the muriatic, which may be given as in the following formula.

R Extracti hyoseyami gr. v.

Mucilaginis acaciæ f ʒ iij.

Acidi muriatici m vj.

Aquæ puræ f ʒ iss.

Fiat haustus; bis terve in die sumendus.

In all cases, purgatives are requisite, and the digestive powers must be attended to with the utmost care. It is questioned, indeed, by some, whether all lithontriptic agency does not resolve itself into the principle of preserving the stomach in such a state as to prevent it from engendering the acid, out of which, lithic concretions are formed. The diet of the person disposed to gravel should be of a simple kind, and all ascendent wines should be avoided. Warm clothing is especially requisite. In tropical regions, where the body is a good deal kept in a perspirable state, calculous disorders are of extremely rare occurrence.

Cutaneous Affections. — These, in one sense, may be ranked among the opprobria medicorum; for the opinions of medical men regarding them are, to this day, extremely discrepant; and their rationale, whether they assume an acute or a chronic form, is often exceedingly difficult to trace. (See Part I. p. 48.) We often find disorders on the surface to be clearly referrible to irritations of the stomach, or some portion of the primæ viæ; and this fact has been stretched by some pathologists of the present day into universality of proposition. But the doctrine which thus generalizes from a few striking particulars is erroneous, and both specific and general, acute and chronic eruptions, have often as little to do with the condition of the first passages, as they have with any other part of the bodily organization. A recent attempt has been made of a learned and laborious cast to arrange and

classify these multiform maladies, by their external characters; but this has proved as analytically erroneous, as the digestive organ notions are, on the other hand, too generalizing; and were this mode of arrangement from external symbols obnoxious to no other objection, this one would be fatal to its accuracy, *viz.* that the cutaneous appearances of one day are often not those of the succeeding; papular and pustular, vesicular and tubercular passing insensibly from one to another state. Another objection against the pretensions to nosological truth, that this scheme of classification lays claim to, is to be found in the amazing variety of constitutional circumstance, and, consequently, of external character, that any one virus meets with in its attack upon the body; and as the fashions and habits of the times change, as the different regions of the world affect, and as the mixture of other disorders operates, so do specific affections gradually and insensibly lose of their identity; and we thus, in a measure, grasp at a shadow, when we attempt to make the description of ancient and foreign authors subservient entirely, and to the letter, to the designation of contemporary ailments. (See Part I. p. 41.) Still, however, it may be right with this reserve, to aim at arrangement, and all who have taken the pains to trace the peculiarities of skin derangements will readily allow that some of these obtain their distinguishing characteristics from peculiarities of the integuments themselves, while others are more or less dependent upon internal peculiarities; that some appear to be vicarious and salutary; others merely marks of so much systematic excitement. A later attempt has been made to recognize dermoid affections under these views, in opposition, partly, to the plan of recognition, merely by external characters; and this surely seems more in harmony and consistency with pathological principles,

generally, than in classifying cutaneous diseases, to lose sight of interior workings among exterior showings. (See *Plumbe* on Diseases of the Skin.) I shall take the liberty of concluding these brief intimations on disorders of the surface, by abridging, with a little alteration, the short account given of them in *Dr. Gregory's Elements*.

1. *Strophulus*.—This is common to infants, under the denominations of red-gum and tooth-rash; it requires no remedy beyond a slight attention to the stomach and bowels.

2. *Porrigo*.—This, when on the scalp, is the *tinea capitis* of authors. "It is characterised by an eruption of straw-coloured pustules, scattered at times over the whole body; but principally observable on the scalp, on the face, behind the ears, and about the ancles." These eruptions are sometimes occasioned by gross diet; at other times they are indices of feeble habit and poor feeding. *Tinea capitis* undoubtedly spreads by contagion.

3. *Acne* is constituted by *papulæ* on the face. It occasionally arises without any obvious cause, and is very little under the influence of medicine.

4. *Herpes*.—(See p. 345.) That species of herpes, vulgarly called the shingles, is named in medical language, *herpes zoster*. This sometimes arises from vicissitudes of temperature; it runs its course in spite of medical agency, and terminates in about a fortnight or three weeks. The *herpes circinnatus*, or ring worm, in hot countries is sometimes tedious and severe. The *herpes labialis* is most commonly symptomatic.

5. *Lepra*.—This disorder is very obstinate. It occurs under all circumstances, and at all periods; it is a scaly disease as opposed to *porrigo*, which is pustular; "it is recognized by circular patches about the size of a half crown piece." *Psoriasis* differs from *lepra* in the irregular

undefined character of its eruptions, and by accompanying fissures of the skin.

6. *Elephantiasis*. (See p. 324.)

7. *Scabies*. — This disorder appears in the form of small vesicles intermixed with pustules, “but its aspects are very various.” It occasionally breaks out on every part, the face only excepted. It is highly contagious. “It consists essentially in the presence of a minute insect burrowing and breeding in the skin.” I may add that pathologists are to this hour undetermined whether this insect be a consequence, or cause of the disorder; some supposing that the communication of itch is by virus, and that the insect is a consequence of the workings of this virus upon the affected body; others imagining that the transference of the affection, is the transference of the animalculæ; and some, indeed, questioning the necessity of its existence altogether.

Treatment of Cutaneous Diseases. — With the exception of its application to the last-mentioned ailment, medicine, merely, can boast of very little power over dermoid disorder. Sulphur is, indeed, a specific in scabies, and the eruption may be got under by other applications, as by the mercurial precipitates and hellebore. Sulphur, too, in the general way seems generally useful, as an internal medicament in most chronic affections of the class now under notice. Dr. Gregory tells us, that he has found the combination of it, with carbonate of soda, very useful in lepra. In tinea capitis and the other varieties of porrigo, the unguentum hydrargyri nitratis, mixed with about an equal quantity of cetaceous cerate, I have found the most useful application; and in almost all cutaneous affections, where there is manifestly a weak condition of cutaneous vessel, I have administered internally, with advantage, the diluted sulphuric acid. When porriginous ail-

ments are accompanied with marasmus or mesenteric obstructions, I find one of the most efficacious of internal remedies to be the hydrargyrus cum creta of the Pharmacopœia. In the anomalous eruptions connected with old venereal complaints, and sometimes merely simulating these last, very small doses of oxymuriate of mercury as the tenth or twelfth of a grain, are administered in combination with sarsaparilla decoction; and with supposed advantage. But these last affections, whether pseudal or real, are usually placed under the care of surgeons. In all cutaneous disturbances, cleanliness is of the highest importance as a preventive and curative agent.

Vaccinia. — This, unlike variola, is communicable only by inoculation. In about twenty-four hours, or rather more, from the insertion of the matter, a little rise is perceptible in the punctured part, and by the third day the elevation is conspicuous. On the fifth day the vesicle is distinct; on the eighth an areola forms around it. This is the time of the eruption's perfection. "On the fifteenth day the vaccination may be considered complete." In order to be genuine and preventive, the progress of the vesicle through its several stages to its completion, must be regular and uninterrupted; but if the system is engaged with other diseases at the time of vaccination, there is danger of the latter not proving proper and efficient. Small-pox, however, interferes with vaccinia in a different way from other disorders; and if inoculation be simultaneously performed with both the variolous and vaccine virus, each disease will run its usual course.

There is, it seems to me, much ground for supposing the identity of these two infections, and for inferring that the greater mildness of the vaccine virus is referrible to

the modifications it has undergone; and I am further disposed to think, that its preventive efficacy against the influence of small-pox is very little if at all inferior to the matter of variolous inoculation. There are several instances on record of second small-pox; and I am inclined to believe, that the occurrence of the disease after vaccination, has more reference to a peculiarity of the constitution in which it takes place, than to a deficiency of preventive strength in the material substituted for variola; and that, therefore, the introduction of vaccine in the place of variolous inoculation must be looked upon as the greatest blessing conferred by Providence upon society, since society has had a being.

In respect to the treatment of variolæ vacciniæ, nothing falls to be said, since it is allowed, on all hands, to be so mild as to demand nothing beyond attention to the due development and progress of the vesicle that results from the insertion of the virus.

Angina Pectoris.—The aggregate of symptoms which gave origin to this appellation, have but recently been distinctly noticed; they consist of violent pain, principally referred to the region of the heart, and especially occurring while the individual, who is the subject of the disease, is walking up hill: insomuch that he is obliged to rest and lay hold of any thing for support, under the impression, that if he continues to exert himself, he shall die. From the region of the heart, the pain shoots across the breast and down the left arm. This affection sometimes comes on after a meal, or subsequent to a longer than usual abstinence; and, in the course of time, the paroxysms recur in the night after the first sleep. Mental anxiety will also induce them. The sense of suffocation is different from that which takes place in asthma, being, as just intimated, rather referred to the heart than to the lungs;

and it does not go off with mucous excretion. The pulse is sometimes irregular and intermitting during the fit; at other times it is not perceptibly altered. Angina pectoris principally attacks the male sex. The individual is sometimes carried off by the violence of a paroxysm.

Causes.—Theorists have busily engaged themselves in tracing the above series of symptoms to one cause; but it is a fact, that there is scarcely any malconformation of the heart or its blood-vessels, that has not been occasionally found after death, from what would be considered angina pectoris; while on the other hand, individuals have fallen victims to the affection fully marked, and the most accurate post mortem inspection has not been able to detect the slightest indications of structural derangement; so that the cause may be organic at one time and functional at another; or, in other words, now structural and now nervous; and indeed the degrees of this disorder, as of almost all others, are so various, that the predication of its presence from symptoms is, in some instances, made with doubtful propriety.

Treatment.—All persons who are subject to cardiac disorder, should ever carefully abstain from exposure to circumstances in any way affecting the circulating movements. Violent exercise; mental emotion; repletion of stomach; long fasting; exposing of the extremities to cold, ought all to be carefully avoided by such persons. In the fit of angina pectoris it will be sometimes expedient to draw a large quantity of blood, and then immediately to give stimulus, as the carbonate of ammonia, according to the formula in p. 263.; at other times this, or æther, or opium, or all combined, must be thrown in without any preliminary abstraction of the vital fluid; in other cases an abstraction of a very small quantity of blood only is requisite and safe; and this various treat-

ment must be pursued rather according to the apparent plethora and fibrous strength of the sufferer, than from abstract notions of the disorder's demands. In the intervals of the paroxysms, the treatment must also be directed by constitutional states. The diet is for the most part to be light; wine and spirits are to be refrained from; and the bowels kept from constipation. In some cases, the recurrence of fits has seemed to be warded off by issues, setons, and the application of the tartrate of antimony ointment (see page 175.); and occasionally, when the malady is purely nervous, the nitrate of silver (see page 278.) has seemed to be of service.

Neuralgia Facialis. (*Tic Douloureux.*) The seat of this painful affection is usually just below the orbit of the eye on the cheek-bone; but it extends from the branch of the nerve first affected, and in the course of time comes to spread itself over the whole of the face. Tic douloureux is distinguishable from all other affections of the part, by the disease being traceable along the branch of the nerve affected, and by its being attended with convulsive twitchings and agonising pains that are quite peculiar. The length of time likewise that it lasts, is another distinguishing feature of the malady. This disease generally attacks the patient between the fortieth and fiftieth year, and will last sometimes during the whole of a long life.

The pathology of the affection is exceedingly obscure: the notion of its consisting essentially of an inflammatory condition of the neurilima that invests the nerve affected, does by no means accord with many circumstances attendant upon its manifestation; and to attribute it to a plethoric or congestive state of the brain is quite vague and unsatisfactory.

With respect to treatment, I am afraid nothing can be

very satisfactorily advanced, unless we are to place confidence in the allegation that very large (drachm) doses of the ferri carbonas are capable, if persevered in for some time, of accomplishing the desired effect. Even the division of the affected nerve will not always avail. All the reputed remedies have been tried in many cases without any thing further than a temporary and transient effect.

SUBDIVISION II.

On the present State of Medicine in Britain.

THE remarks that have already been introduced throughout the present tract, may, in some measure, supersede a lengthened dissertation on these points; it will not, however, be out of place here briefly to trace the revolutions of medical science, and express an opinion respecting the respective merits and demerits of present theories.

With some persons indeed, the notion of theory, as applied to the art of healing diseases, is considered to be altogether nugatory; and it must be admitted, that much of medical doctrine and dicta has prevailed at different times, without proving materially influential upon practical indications. I am ready moreover to admit, that a large proportion of therapeutic endeavour is conducted more especially in the present day, under the guidance of an empiric good sense, without reference to the institutes of determined systematics; but still it will be found that the most decided oppositionist to partial views, and

particular creeds, is in a greater or less degree influenced in his feelings, and directed in his habits, by the prevailing theories of the times. No one surely will deny, that up to this moment, in which I am writing, many sensible and *unsystematic* practitioners are pushing at the liver, and prescribing blue pill, or correcting the chylopoietics, or emptying the blood vessels, or battling at congestion, or thinking about morbid conditions of mucous membranes, who, had they been living in the days of Boerhaave, of Hoffman, or of Cullen, would have been acting under the notion of deobstruent agency; have been busily employed in attempts to restore the balance of nervous and fibrous excitation, or in finding out the best methods of resolving spasm, and regulating reaction. Nor would the difference in these cases be merely in terminology; the medicaments and actual modes of management would also differ, so that it is of *some* consequence, to say the least, for us to look well to the correctness of propounded principia before we permit them to become, either in whole or part, "parcel of the mind." And it further behoves us to look well towards the correction of another, but opposite tendency, *viz.* that which refuses to receive *any* of the good of system, inasmuch as it is mixed with evil. Indeed it is an error to suppose that system in itself is bad, or to endeavour to supersede its necessity. To think is to systematise; and a process of thought must ever precede all acts that are not instinctive or involuntary. "It is impossible to observe the various appearances in nature without remarking certain circumstances in which they agree; to remark these circumstances is to *arrange* the similar appearances. It is thus impossible not to systematize; and hence the question should be, not, whether systems be useful, but to what extent, and in what mode they can be most usefully formed."

There ought of course to be as little as possible assumed; or rather the assumption having been once made, its legitimacy ought not to be blindly and obstinately maintained, but on the contrary, it should be tried by the severest tests of affiliation. Thus, if I find certain *post mortem* appearances subsequent to a certain series of symptoms, I may register or *arrange* the two circumstances under one head of cause and effect; and I may be pleased with having detected a connection which has escaped the sagacity of others; but I must not conceive such a partiality to my supposed discovery, as to defend its cause against subsequent development of truth. And it is precisely from this point, whence all the errors of systematics commence and proceed. When we talk of congested veins, inflamed arteries, disordered tissues, chylopoietic disturbances, and hepatic derangements, as influencing the whole series of organic movements, is not one link only in the chain of causation open to our perceptions, while the remainder are among the invisible or dimly seen? Are we not apt to overlook the impelling, in our eagerness to grasp at the impelled? In other words, do we not seize hold of one or two striking facts in morbid manifestation, and hurrying away with them to our closets, mould them into a mass, and eventually throw them out upon the world as presents from nature, whereas they are in reality, half the product of our own manufacturing ingenuity? Thus, for a time, the most daring and novel become the most accredited propositions; but as soon as their charm of novelty is gone by, and their propounders are laid in the silent grave; the adventitious separates itself from the real, and the dross is discovered to bear an immeasurably large proportion to the intrinsic of the doctrine.

Brown would have effected an abundance of good, had

he been content to have ridiculed the metaphysical abstractions, or physical absurdities of preceding systematics, but his failure consisted in attempting another abstraction, in lieu of those he had hurled to the dust; and an abstraction, which was still more mischievous in its bearings, than those that had gone before; inasmuch as that part of it which was illegitimate and bad, was more positively and practically so than its predecessors; it is indeed frightful to contemplate the evil that must have resulted from the determined application of his sweeping dogma, which it is surprizing was not sooner brought to the *ad absurdum* test of trial as to its rectitude. But even in this system, degraded as it at present is, I think I can discern a great deal of actual good; and a great deal moreover of the indirect and direct occasion of those theories, that are at present the order of the day.

By stating, in the language of Brown, objections to the theories of medicine that had gone before him, and then making a few remarks on his own, and on that of his followers, I shall best, perhaps, fulfil the intention with which I commenced the present paper, *viz.* that of giving my reader a very general view of what has been attempted from the earliest to the most modern times in the way of medical theorizing. "Deviation from the state of health in which the morbid state consists, is not, (says Brown,) either repletion or inanition; or changes in the qualities of the fluids, whether of an alkaline or acid nature; or the introduction of foreign matters into the system; or a change of figure in the extreme particles; or a disproportion in the distribution of the blood; or an increase or decrease of the power of the heart and vessels as regulating the circulation, or a rational principle governing the actions of the body, or an alteration in the extreme particles, as being of too large or too small a size, or an

alteration of the pores as being too narrow or too capacious, or a constriction of the superficial vessels from cold; or a spasm of these vessels, producing a reaction, as it is called, of the heart and interior vessels; or any thing that any person has yet thought of respecting the cause and nature of the morbid state. On the contrary, health and disease are the same state, depending on the same cause, that is excitement, varying only in degree; and the powers producing both are the same, sometimes acting with a proper degree of force, at other times either with too much or too little; the whole and sole province of a physician is not to look for morbid states and remedies which have no existence, but to consider the deviation of excitement from the healthy standard in order to remove it by proper means."

It will be readily seen, that this subordination of every thing in the living œconomy, to the leading and master principle of excitement, constitutes the essence of Brunonian pathology and practice. A subordination that may be illustrated by adducing one or two examples. Suppose an individual to be affected with the disorder called diabetes, which disorder is constituted mainly of an altered quantity and condition of the urinary secretion; at least, that is one of its most prominent characteristics. The philosophy of Brown would teach us, that the general systematic derangement, by which the malady is constituted, is the only matter of consequence to attend to; and could we but bring the excitement, that is, the healthy *actions* of the system to a proper balance and bearing, every thing else would fall, by consequence, into regularity and order; the functions of the kidneys would be restored to their wonted integrity, and health would take place of disease.

Again, suppose that a man falls down in an apoplectic

fit; he dies, and you examine the condition of the brain; whether it is, or is not laden with an undue quantity of blood or serum; whether some of the blood-vessels of the organ have or have not given way: the main circumstance to be regarded in appreciating the nature of the affection is, the extent to which the excitement has been implicated; and the only effectual way of warding off attacks of apoplexy, or even of remedying them when they are remediable, is not to set about emptying the blood-vessels, which is a debilitating process, and calculated to be destructive of its own design; but to aid the sinking, and restore the lost excitement.

Now, even to those who may not have given their thoughts to the subject of medicine, prior to the perusal of the present page, it will immediately, one should suppose, be suggested, that the uniformity in disease-creating and health-restoring powers thus contended for, by the assumptions of our speculatist, would do away altogether with the necessity of any combination or complication of medicinal articles; and such suggestion is not merely the *ad absurdum* inference from the premises; but almost the admitted and declared creed of Brown himself. Opium was, with him, the elixir of life; the grand preventive of sickness; the great restorer of health. He does, indeed, admit, that the laws of excitability are such, that when the effects of one stimulating or exciting power have ceased, another comes in and supplies its place; thus, where opium has done its best and its worst, coffee or brandy, or æther or wine will act as its substitute; but this very admission, when taken in all its extent, is positively subversive of the very principle propounded, for were all exciting powers equal, both in kind and degree, an increased dose of *one*, ought to prove equivalent to every demand.

Again, why should opium, allowing it to be a stimulus, constringe the bowels, or cause a pain in the head more readily than some other stimuli *? why should ipecacuan occasion sickness? why should aloes purge? how is it that mercury operates upon the salivary glands, and squill upon the kidneys? if all agencies merely apply themselves to the general excitability, and are resolvable into general excitants. But further, if we are asked, in what this excitement consists, the question does not admit of any other reply than "increase of vital action." But it is well known, that almost numberless are the powers which act upon living matter without causing any increase of action, nay, which operate upon precisely the reverse principle; that of lessening activity; a fact so obvious to every observer, that Brown thought it necessary to explain it away by assuming, that these sedatives are in fact concentrated or consummate stimuli, so that where an individual suddenly sinks and loses life under the malign influence of a powerful poison, we are told to believe, by the Brunonian systematics, that it is quantity not quality, by which the effect has been brought about; and that less of the very same material would have excited and supported, instead of extinguishing and destroying vitality. With respect to the specific and local operation of medicinals just adverted to, our exciting theorist would endeavour to explain these away, by talking of modifications in the modes by which the excitability is manifested; and

* It is a curious fact, that one of the principal effects of opium, and that which often renders it inadmissible, is to lock up some of the secretions, and thus produce disease; a mode of engendering malady, which Brown, as from the above extract will be seen, contends does not obtain.

by having recourse to other subterfuges, which though they may satisfy the minds of determined systematics, fail to give the same satisfaction to men whose object in research is not system but truth.

I have already, however, said, that much of what is good may be mixed up with extravagant and eccentric conceits,—and this position, I take, to be proved by the Brunonian doctrine of medicine, which has served to stamp a character of precision and truth upon several pathological precepts that were previously vague and unstable. His positions, it is admitted, were wild, and his practical deductions, in many cases, erroneous and dangerous in the extreme; but, nevertheless, the principles he inculcated respecting the subordination of vascular states to the prevailing degree of systematic excitement, are true in a qualified sense; and important in their therapeutic bearing.

Again, in their attempts at simplification to what has been found an unwarrantable extent, the principles of Brown have certainly served to render less complicated and confused, the general indications of treatment in disease; and they have helped to give the death-blow to that illegitimate kind of reasoning on vital causation, to which I have alluded in the first part of the present work, and which, in defiance of the canons of Baconian philosophy, had still continued to aim at reducing physical truths to metaphysical principles, and to suppose, that essences are explained when terms merely are employed. That this looseness of philosophising should continue to infest medicine after it had been banished from other departments of science, may in part be ascribed to that especial difficulty there is, in the healing art, of identifying sequence with consequence. Since the *Elementa Medicinæ* have been published, the language of poetry

and fiction is not applied so freely as was wont to be the case, to the purposes of medical philosophy.

I have adverted already to the vulnerable and mischievous parts of Brown's propositions; but beside the mischief that must have thus been occasioned by the unqualified reception, and unreserved application of his daring and desperate precepts; their promulgation has probably been productive of evil in a more indirect manner. It will have been inferred from some of the preceding remarks, that our theorist attached very little importance to the different affections of the several viscera and internal organs of the frame, conceiving that these are merely so many incidental expressions, as it were, of general disorder; and that they are only radically remediable by remedying the faulty condition of the mainspring of all organic movements. That this dictum, in its full development and application, involves gross and practical errors, must soon have become evident; but the systematic oppositionists to the principle have not always stopped at the right point in objection. From *no* organ it has become, in the minds of some, *all* organ; and in a determined contravention of Brunonian extravagancies, are probably to be found, as above intimated, the elements of those organic doctrines that have recently been universally promulgated and brought, perhaps, to too great an extent into practical application.

Just at the time in which the tide of opposition set in against the tenets of excitement, physiological and pathological anatomy began to be cultivated both in this country and in France, with an unprecedented ardour; and now the feeling of the day running into minutiae, as it had before been directed rather to abstraction and generalities, visceral and vascular, and membranous notions came to supersede those dogmata, which rather looked to the

whole than to parts; to prime principles in preference to incidental occurrences. Withal, however, we find that the tendency of the mind, which leads to combining loose facts into the relations of totality, has influenced the speculations of anatomical and minute, as well as it had done those of more metaphysical and abstract bearing; and, I apprehend, that the downfall of the Brunonian doctrines, has not proved the entire abolition of all that is fanciful in theory, and I was going to say, fearful in practice. The encephalic hypothesis, or that which attributes all manifestation of febrile disorders, to a disordered state of the brain; the hepatic system, which, with a jaundiced eye, looks to the liver for an explication of all morbid phenomena; the ventricular dogma, which derides the notion of any diseased production, but through the direct agency of the digestive processes; the membranous mania, which is for ever torturing your ears with the terms of tissue and texture; and the congestive pathology, which refers every thing to fulness of blood-vessels and irregular distribution of the vital fluid; are all so many instances of defects in systematising. Attempts to embrace totalities are all, moreover, so many proofs of the bias that exists towards re-acting extremes; and of the care with which it still behoves the medical student, to cultivate an eclectic and independent spirit of thinking, lest he be led away from sober and serious, and real and useful courses of study, into the enticing paths of fanciful and fallacious generalities.

“Ninety-nine out of a hundred of medical facts are medical lies, and all medical doctrines are stark staring nonsense;” said the late Dr. Gregory, with his characteristic boldness of caricature representation; but he at the same time was no sceptic. In the very volume from which the above extract is taken, we find the great utility

of the science advocated with ability and success; and we find, moreover, an opinion expressed, that medicine is in an improved and in a still advancing state; and so, in despite of the fancies and faults of theorists, I verily believe it to be. I have already alluded to the diminished fear with which, in the present day, physicians meet and encounter formidable disease, and I have great pleasure, in referring by way of conclusion, to an interesting paper of Sir Gilbert Blane, in a volume entitled "Select Dissertations on several subjects of Medical Science." By a perusal of this paper it will be found, that throughout England, and even in the metropolis, life and health are at a much higher ratio in the present than in the preceding centuries; a fact, certainly, which so far from being in proof, that the science and art of healing are in a state opposite to progress, must, as far as it is permitted to have any bearing at all upon the question, happily lead to an inference directly and largely the reverse.

TABLES OF CHANGED NAMES

In the last Edition of the Pharmacopœia.

TABLE I.

NEW NAMES.	FORMER NAMES.
A.	
Acidum aceticum dilutum.	Acidum aceticum.
———— arseniosum.	Oxydum arsenici album.
Arsenicum album.	Arsenici oxydum sublimatum.
———— sublimatum.	
C.	
Calumba.	Calumbæ radix.
Cantharis.	Lytta.
———— vesicatoria.	———— vesicatoria.
Ceratum cantharidis.	Ceratum lyttæ.
———— plumbi acetatis.	———— Plumbi superacetatis.
Cucumis colocynthis <i>Peponum</i> <i>pulpa.</i>	Cucumis colocynthis, <i>Pomorum</i> <i>pulpa.</i>
E.	
Elaterii <i>pepones.</i>	Elaterii <i>poma.</i>
Emplastrum cantharidis.	Emplastrum lyttæ.

NEW NAMES.

FORMER NAMES.

I.

Infusum lini compositum.
 ———- rosæ compositum.
 ———- sennæ compositum.

Infusum lini.
 ———- rosæ.
 ———- sennæ.

M.

Magnesiæ subcarbonas.
 Marmor album.
 Matonia cardamomum.

Magnesiæ carbonas.
 Lapis calcarius.
 Elettaria cardamomum.

P.

Pix abietina.
 — nigra.
 Plumbi acetas.

Pix arida.
 Resina nigra.
 Plumbi superacetas.

T.

Tinctura cantharidis.

Tinctura lyttæ.

V. & U.

Vinum antimonii tartarizati.
 Unguentum cantharidis.
 ———- picis nigræ.

Liquor antimonii tartarizati.
 Unguentum lyttæ.
 ———- resinæ nigræ.

TABLE II.

FORMER NAMES.

NEW NAMES.

A.

Acidum aceticum.

Acidum aceticum dilutum.

Arsenici oxydum.

Arsenicum album.

———— sublimatum.

———— sublimatum.

C.

Calumbæ radix.

Calumba.

Ceratum lyttæ.

Ceratum cantharidis.

———— plumbi superacetatis.

———— plumbi acetatis.

Cucumis colocynthis, pomorum
pulpa.

Cucumis colocynthis peponum
pulpa.

E.

Elaterii pulpa.

Elaterii pepones.

Elletaria cardamomum.

Matonia cardamomum.

Emplastrum lyttæ.

Emplastrum cantharidis.

I.

Infusum lini.

Infusum lini compositum.

———— rosæ.

———— rosæ compositum.

———— sennæ.

———— sennæ compositum.

FORMER NAMES.	NEW NAMES.
L.	
Lapis calcarius.	Marmor album.
Liquor antimonii tartarizati.	Vinum antimonii tartarizati.
Lytta.	Cantharis.
—— vesicatoria.	—— vesicatoria.
M.	
Magnesiae carbonas.	Magnesiae subcarbonas.
O.	
Oxydum arsenici album.	Acidum arsenicum.
P.	
Pix arida.	Pix abietina.
Plumbi superacetas.	Plumbi acetas.
R.	
Resina nigra.	Pix nigra.
T.	
Tinctura lyttæ.	Tinctura cantharidis.
U.	
Unguentum lyttæ.	Unguentum cantharidis.
—— resinæ.	—— picis nigræ.

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